Final Report on
Qualitative Analysis of the
Program of All-Inclusive Care for the Elderly (PACE)

by

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Executive Summary

In August, 1989, the HCFA Research Center began an 18-month qualitative evaluation of a series of projects seeking to replicate the On Lok Senior Health Services model, a working model of capitated, comprehensive, risk-based acute and long-term care in San Francisco, California. HCFA has sponsored, in cooperation with several national foundations, these "PACE" (the Program of All-Inclusive Care for the Elderly) projects. The first eight sites chosen to replicate the model (Boston, Massachusetts; Bronx, New York; Chicago, Illinois; Columbia, South Carolina; Denver, Colorado; El Paso, Texas; Milwaukee, Wisconsin; and Portland, Oregon) provide varied settings in which to examine the feasibility of reproducing this comprehensive approach to capitated care of the vulnerable elderly.

Given the limited success of other long-term care demonstration initiatives (e.g., Long-term Care Channeling) in reducing or avoiding institutionalization or in reducing overall costs, there is increasing hope that the apparent success On Lok has had in controlling costs for its population of frail elderly can be achieved in other service delivery settings. This will depend largely on whether On Lok's success hinges on the underlying principles of its model or on its unique characteristics and history. Thus, in this work we have attempted to answer several important questions: Can the program which seems to work well in a very specific environment be effectively transferred to other settings? What characteristics of settings are associated with successful translation? What critical elements must be present? How is the essence of the care adapted to new settings? Can the replication projects condense the lessons and work of almost two decades into a transition period of about two years? This overall qualitative examination of the PACE projects is both cross-sectional and longitudinal and is based on a combination of hard data, anecdotal evidence, and direct observations. We have addressed both questions of variation across organizations and questions of change.

A four-day site visit to On Lok, interviews with many key staff members, and continued telephone contact, have allowed us to explore the On Lok model. With this background, we were then able to develop a case study for each of the eight replication sites including the history of its sponsoring organization and progress in incorporating the On Lok components and philosophy. The case studies were based on two site visits to each of the eight sites lasting from one to three days where semi-structured interviews were held with key figures including the executive directors, financial and data managers, medical directors, day health center supervisors, the head of both nursing and social work, members of the governing board, and appropriate state staff. Each site visit included a site tour, observation of day health center activities, attendance to Intake and Assessment meetings, and monthly follow-up interviews.

Four of the replication sites (Boston, Portland, Columbia and Milwaukee) are operating as capitated programs. Boston and Portland started capitation in June 1990, Columbia in October 1990, and Milwaukee one month later. Of the four remaining sites, the Bronx's waiver was approved in May 1990 (at the same time as the Boston and Portland waivers) but negotiation hold-ups with the State of New York delayed their Medicaid contract, which is only now in the final stages of negotiation. Denver and El Paso submitted waivers in the spring of 1991, although El Paso's is a modified waiver that makes them responsible, during their first year of capitation, only for that portion of the services that Medicaid normally covers--essentially all those services other than primary care and inpatient services.

Using the underlying principles of the On Lok model as a framework for discussion, the final report describes these eight distinct interpretations of the model--some that have adhered to the On Lok model very closely, others that have developed along somewhat different lines. By definition of the model, there are several characteristics that will not vary from site to site. For example, all sites will eventually, if not already, offer the same array of acute and long-term care services either directly or through contract, all are financed through Medicaid and Medicare funds, and each site has a multidisciplinary team to control services. However, they will also differ in ways, such as in patterns of service use, levels of funding, and tendency to have one discipline that dominate the others.

Other factors, above and beyond the On Lok principles, may affect performance such as sponsorship and history, state support, and management information systems capabilities. A sponsoring organization's willingness to absorb cost-overruns and to provide services at cost has obvious affects on performance as does the sponsoring organization's previous history in providing services to the elderly or in providing services under capitation. Several sites have large, generous sponsors, others are free-standing organizations that do not enjoy this luxury. States not only set the Medicaid rates for the sites but also determine the functional and financial criteria that participants must meet. To control costs, the states with the most generous financial criteria also have the most restrictive criteria and vice versa. This is a model highly dependent on controlling utilization and expenditures, making, management information systems capabilities a primary concern. On Lok has developed a system for the sites to use for this need, either exclusively or in tandem with their own existing systems.

Previous experience in merging a care system and the availability of an administrative structure appear to be important ingredients in launching and maintaining successful replications. Ironically, although On Lok evolved from a base in a free-standing community agency, the replication sites may develop best in the context of established organizations.

Now that a second generation of replications sites has been launched, it is important to distill the critical lessons from the experiences of the first eight

replication sites. Most important is the necessity of sites to obtain sufficient start-up funds. The Robert Wood Johnson Foundation granted close to $700,000 to six of the first eight sites with a requirement that each raise matching funds of $300,000. The financial viability of the two sites that did not receive Robert Wood Johnson funding (Chicago and Denver) has been a constant source of concern both for the sites and those interested in seeing the On Lok model successfully replicated. The transition from fee-for-service to fully-capitated program is made easier when the site, in its pre-capitation phase, offers as close to the full range of services as are available once capitated but this takes substantial capital and staffing. There is only limited availability of fee-for-service dollars to fund operations making outside funding imperative.

The enrollment rates for the capitated sites have been lower than originally projected. The degree of successful turnover of clients from the precapitation population has varied from site to site. The losses from death and, to a lesser degree, disenrollment make growth more difficult. An active and aggressive marketing effort is needed to overcome three major barriers to enrollment: aversion to day health care, reluctance to changing physicians and the reputation of some of the affiliated hospitals.

The sites' financial viability is further complicated by the fact that all but one of the first eight sites have faced slower than expected census growth. When fee-for-service dollars are limited, it is even more critical that there be a large enough pool of people being served to maximize these limited dollars and to spread the significant fixed costs. The inability to attract sufficient numbers of participants to cover costs, is the combined effect of offering, with limited marketing sophistication and experience, a "product" that even staff have difficulty defining, that is new to the consumer, and that is in flux.

Another vital issue involves staff--not just issues of building teams with strong clinical skills and ability to work in a multidisciplinary approach, but in retaining staff. Staff turnover has been high, particularly among physicians and adult day health center directors. For adult day health center directors, attention needs to be paid to finding acceptable management arrangements that clearly define lines of authority and responsibility and that capitalize on work styles and existing structures. Close attention must be paid to recruiting physicians that can practice to a standard they are comfortable with while taking the risks necessary to maintain the participants in the community.

Finally, to the best of the site's ability, care must be taken in developing the right patient mix--both in terms of acuity and dementia. Some sites may feel they have encountered adverse selection and that they are unable to handle the acuity of their patient mix with only limited experience, while others may have purposefully selected only the lighter end of the eligible population to ease the transition into capitation.

A separate issue surrounds mixing of cognitively impaired clients with those who are not. Several assessment tools used by the states to determine

care needs heavily weight cognitive impairment, resulting in a significant number of clients deemed eligible for the program having some form of dementia. This has strong implications for the day health center milieu and raises important questions for the replication sites. It is too early to tell if the presence of a large number of demented clients in the day health center will create for the non-demented client yet another barrier to enrollment of non-demented clients and how different the program will look if it has to accommodate the needs of a heavily demented population. Caring for the demented client must certainly be kept in the forefront of discussions.

Introduction

The Program of All-Inclusive Care for the Elderly (PACE) seeks to replicate On Lok, a working model of capitated, comprehensive, risk-based acute and long-term care in San Francisco's Chinatown. The first eight sites chosen to replicate the model (Boston, Massachusetts; Bronx, New York; Chicago, Illinois; Columbia, South Carolina; Denver, Colorado; El Paso, Texas; Milwaukee, Wisconsin; and Portland, Oregon) provide varied settings in which to examine the feasibility of reproducing this comprehensive approach to capitated care of the vulnerable elderly. Although recently passed legislation (the Omnibus Budget Reconciliation Act of 1990 or OBRA '90) extended the number of PACE demonstration sites to 15, this study looks only at the first eight. On Lok has been working with the second generation of sites now in various stages of development.

The replication project, in essence, is attempting to condense the lessons and work of almost two decades into a transition period of about two years. Thus, several important questions are being asked: Can the program which seems to work well in a very specific environment be effectively transferred to other settings? What characteristics of settings are associated with successful translation? What critical elements must be present? How is the essence of the care adapted to new settings?

This translation is important in helping to define what are the essential characteristics of the On Lok program. Because there has been only a single program until now, everything about it is equally correlated with its success. The replications have attempted to capture elements of On Lok, spurred both by example and by the mandate of the replication eligibility process.

The On Lok model is the most extensive program of capitated care for elderly persons in need of long-term care. This is a group with high needs and correspondingly high service costs for both acute and chronic care. No other program has attempted complete service capitation. The TEFRA HMOs (i.e. HMOs authorized under the Tax Equity and Fiscal Responsibility Act) cover primarily basic Medicare services oriented to acute care. The Social Health Maintenance Organizations (SHMOs) provide a modest long-term care coverage for the deliberately small proportion of their clients needing such care.

This paper explores the model by looking first at On Lok itself and then looking at the characteristics of the replication sites in an effort to deduce the essential elements of On Lok. In doing so, this paper also suggests how differences in the developmental experiences of the eight replication sites might affect their futures and plans for evaluating their success.

The On Lok Model

On Lok combines risk-based capitated care with a program of comprehensive care for frail elderly persons who are at high risk of institutionalization (Zawadski and Ansak, 1986; Zawadski, 1985). With a strong

emphasis on the use of day health care and a reliance on an interdisciplinary team to manage and deliver services, On Lok's primary goal is to keep participants living independently in the community and out of costly hospitals and nursing homes.

On Lok Senior Health Services began about 20 years ago when a group of concerned citizens, after serving on a municipal task force to look at problems in San Francisco's Chinatown, formed a nonprofit organization to address the fragmentation of health services and the community's need for nursing home beds. Unable to build a nursing home because real estate costs were prohibitively high, they created a system of centralized services based on the English day hospital model (Zawadski, et al., 1984; Berkeley Planning Associates, 1984).

During its first decade, On Lok financed operations through a series of research and demonstration grants from the Administration on Aging, the California Medicaid Program, and the Office of Human Development Services, all the while expanding the continuum of services it offered. Later, having successfully operated under Medicare waiver authority between 1979 and 1983, On Lok initiated a risk-based program broadening the funding base to use both Medicare and Medicaid waiver dollars (Ansak, 1990; Zawadski, 1985). They now receive prospective monthly payments totalling $2480 per enrollee from these two funding sources and have assumed full responsibility for the care of more than 300 frail elderly participants at any time.

The first component of the continuum of services On Lok developed was the day health center. On Lok still relies heavily on the day health center as the primary delivery setting that is best for monitoring their participants, controlling services and costs, and providing stimulation to participants who are otherwise homebound and isolated. Gradually On Lok added in-home services, housing, skilled nursing and inpatient medical services to their service options. Now a full complement of acute and long-term care options are available (either directly provided or contracted) in order to respond to the many complex problems that afflict their participants. This includes all health and social services required by the participants, both inpatient and outpatient. The range of services is broader than the traditional Medicare and Medicaid benefits because it is not subject to coverage restrictions. For example, preventive health measures are highly utilized in this model while remaining an uncovered benefit under others. Virtually, any service necessary for the participant to maintain his/her independence in the community is covered.

From the very beginning, protective congregate housing, while not included in the capitated rate, was envisioned as a key component of this model. Although an early first effort at incorporating housing into the model was unsuccessful, On Lok now runs On Lok House, a 54-unit apartment building financed in part by the U.S. Department of Housing and Urban Development that houses one of On Lok's day health centers as well as two transitional housing units for respite and monitoring. All residents are On Lok participants and in keeping with HUD regulations, they pay a sliding-scale amount equal to

1/3 of their income for rent. Because On Lok House is the participants' home, they can receive in-home services there. On Lok also owns another housing site which was purchased with funds raised through a capital campaign. These units are rented to participants for $450 a month. More than 10% of On Lok's participants live in communal flats where several bedrooms are situated in a suite; a health worker lives with these participants and cares for their personal care needs when they are not attending the day health center.

Transitional housing plays an important role in keeping participants out of costly hospitals or in reducing their stays. Rather than placing a participant with an uncomplicated medical condition in the hospital for medical monitoring and observation, On Lok uses transitional housing units to provide 24-hour supervision and attendance. These units are also used for respite. Participants living in the community may stay up to two weeks in these units, giving their families a needed rest.

The heart of the On Lok model has always been the multidisciplinary team, which both manages and provides care (Zawadski and Eng, 1988). Each member of the team brings particular insight from his or her discipline so that all aspects of a participant's care can be addressed. This team of professionals and paraprofessionals has a wide range of responsibilities that includes assessment and periodic reassessment of participants' needs, development of care plans, and oversight and delivery of all services. By consolidating these responsibilities in the multidisciplinary team, On Lok felt it would be able to control both the quality and the continuity of care as well as program costs.

Several factors make On Lok's multidisciplinary team an effective operating group. The team has a high level of longevity with the program; there has been virtually no turnover among its major designers and implementers. Management professes to being very selective in whom they hire looking for versatility, inquisitiveness, comfort in caring for chronically ill or terminal participants, and a philosophy that meshes with those of the other staff. Those who are hired tend to stay. The special attention given to salaries, benefits, and staff needs (such as potential for growth and flexibility within jobs) has been credited with this ability to maintain a low turnover rate. Their payscale is high for non-profits but not as high as the area's hospitals. They do provide a full benefit package including salary increases that take into account cost of living and merit, bonus plans, tax-sheltered annuities, vacation, and sabbaticals. Further, they make extra efforts to put together an attractive package to compete for and retain certain groups (e.g. physical therapists) in great demand.

On Lok's location in Chinatown offers a special advantage with regard to recruiting paraprofessional health staff. It has been able to draw from a well-educated pool of foreign professionals staff who have not been able to obtain professional licenses to carry out the work for which they were originally trained. Thus, among its aides, On Lok has physicians and nurses.

The community On Lok serves is as unique as the program itself. On Lok's service area is the Chinatown and North Beach communities of San

Francisco. This is a small (3.5 square miles), densely populated, ethnically diverse (mostly Chinese, Filipino and Italian immigrants) area. The majority of On Lok's clientele are Chinese, mostly of immigrant background. This population raises both practical and theoretical questions about the uniqueness of the setting and the substantial cost savings attributed to its organized program of care and creative packaging of services. Is managed care made easier when the expectations of the participants and families are so modest that they minimize heavy demands on expensive services? Are these participants and families more willing to accept living under difficult circumstances? Are they more likely to comply with treatment regimens and accept professional guidance? Does the tradition of filial piety provide a level of support from children that greatly reduces the formal service burden and supplements financial support for uncovered services? Does the compact size of the catchment area make transportation more feasible? Similarly, does the small size of the participants make transportation more feasible than would be the case elsewhere?

Such questions have prompted concerns that even if its reports of success were accurate, On Lok may rely on idiosyncratic conditions to achieve it. The replication projects were both a response to the encouraging reports from the pilot venture and an opportunity to test the feasibility of translation. The critical issue in replicating this complex system of care is what elements are essential and which can be considered stylist preferences.

The goals of On Lok

Simply put, On Lok's goals are to provide care which improves or maintains participants' functional independence enabling them to avoid institutional care and remain at home, and to do so at the same or less cost as other traditional long-term care programs. There is a direct intent to cross-substitute between acute and long-term care. The services are intermingled to the point where they are difficult, if not impossible, to separate. By providing individualized care that can be modulated as the service needs of the participant change, On Lok avoids the functional decline that can result from unmet needs and the unnecessary costs associated with overmet needs. They believe that the costs of the extensive services, including a strong emphasis on preventive care and rehabilitation, provided in the day health center or home can be more than offset by reduced use of expensive services in hospitals and nursing homes. Although there is a general disinclination to use expensive services like hospitals and a general sense of costs (service utilization data are officially available to management staff only), the direct care staff understand that scrimping on services often can have untoward repercussions.

Implications

Given the limited success of other long-term care demonstration initiatives (e.g., Long-term Care Channeling) in reducing or avoiding institutionalization or in reducing overall costs, there is increasing hope that the apparent success On Lok has had in controlling costs for its population of frail

elderly can be achieved in other service delivery settings. This will depend largely on whether On Lok's success hinges on the underlying principles of its model or on its unique characteristics and history.

At the same time, there are some important differences between the original site and its clones. On Lok now has close to 20 years of experience developing and refining the model as we know it today. It has assumed full risk in the last six of these years, but only after earlier failing to design a suitable risk-sharing arrangement with Medicare and Medicaid. It is not clear how the leisurely pace that On Lok enjoyed figures into its success and thus how an accelerated timeframe will affect the replication sites' success. Certainly there are some advantages to having time to try new approaches, make mistakes and learn from them. The On Lok staff may have more sense of ownership in the model because they have had more opportunity to shape the evolving process of care than do the PACE sites' staff, who seek to replicate rather than create.

Replications

At the time of this writing, four of the replication sites (Boston, Portland, Columbia and Milwaukee) are operating as capitated programs. Boston and Portland started capitation in June 1990, Columbia in October 1990, and Milwaukee one month later. Of the four remaining sites, the Bronx's waiver was approved in May 1990 (at the same time as the Boston and Portland waivers) but negotiation hold-ups with the State of New York delayed their Medicaid contract, which is only now in the final stages of negotiation. Denver and El Paso submitted waivers in the spring of 1991 although El Paso's is a modified waiver that makes them responsible, during their first year of capitation, only for that portion of the services that Medicaid normally covers--essentially all those services other than primary care and inpatient services. These two sites are expected to begin capitation in October 1991. The previously referenced OBRA '90 legislation allows the second generation of PACE sites to spend up to two of the three demonstration and risk-sharing years under this Medicaid-only election. Chicago should submit its waiver sometime this summer and expect to start operating under a capitated system early next year.

The PACE program represents a combination of private and public funding. HCFA has committed to provide waivers that allow capitated contracts using Medicare and Medicaid funds. The initial costs of the demonstration have been supported largely by private foundations and sponsoring organizations. Prior to capitation, the sites have relied on financial support from national and local foundations for site and staff development, and for service expansion. Six sites (Bronx, Boston, Columbia, El Paso, Milwaukee and Portland) have received substantial (up to $700,000) grants from the Robert Wood Johnson Foundation (see Table 1). The other two sites have been supported by local foundations. In addition, most sites receive fee-for-service payments for at least some of their services (mostly adult day care) during the pre-capitation phase. Prior to capitation, the Milwaukee site received a special waiver from the state to use unused Community Options Program (COP) slots (previously given only to counties) for a broad set of alternative services to prevent use of nursing homes.

On Lok has played a major role in the replication project from the start. With funding from the Robert Wood Johnson Foundation, On Lok first did a one-year study to determine if a replication project was feasible, after which it was heavily involved in the initial selection of the replication sites. A national Request For Proposals from sites interested in replicating the On Lok model generated responses from 160 organizations of which 24 organizations completed the application requirements and requested full feasibility assessments. The eight sites eventually selected were judged on their organizational history and structure, community involvement and need, the scope of medical and long-term care services they provide, fiscal management, and public and private financing support. Now, On Lok provides continuous technical assistance to the sites to assure, among other things that the sites are adhering to the model. This is done through regular contact with the sites including on-site reviews and consultations, and provision of operating manuals and other related materials.

On Lok has delineated six transition phases (start up, service expansion, waiver application, waiver program initiation, risk expansion, and full risk assumption) that they expect sites to move through over a four to five year period. The expectation was for each site to spend approximately six months in each of the three transitional phases prior to waiver initiation, and a year in each of the three following capitation. Despite these well-crafted guidelines, however, Figure 1 indicates that sites have moved at significantly different rates from being a day health center through service expansion to being a fully operational, capitated PACE program. One roadblock for sites that have applied for waivers has been the prolonged wait for approval from the Office of Management and Budget. It took 18 months for the first set of approvals to be issued. The second group to submit waiver applications (Milwaukee and Columbia) had a quicker turnaround but final approval still came ten months after submission.

Aside from the delays sites faced in receiving waiver approval, they have also varied from the On Lok guidelines in the amount of time needed for start up and service expansion. Two sites (Milwaukee and Denver) simultaneously started their day health center (the requirement for start up), physician offering primary care and therapy services, and meeting as a multidisciplinary team (the service expansion criteria). Others have either taken a much shorter length of time (Portland) or a much longer length of time (El Paso) to move through these phases.

Methods

A four-day site visit to On Lok, interviews with many key staff members, and continued telephone contact, have allowed us to explore in depth the On Lok model. With this background, we were then able to examine the replication efforts and the extent to which they have be able to incorporate the On Lok principles. At the same time, the importance of adherence to the total On Lok prototype is not yet established. Thus, our interest is in primarily comparing

sites to each other rather than simply examining the degree to which the sites meet some pre-specified On Lok standards.

We have developed a case study for each of the eight replication sites including the history of its sponsoring organization and progress in incorporating the On Lok components and philosophy. We have conducted two site visits to each of the eight sites lasting from one to three days, the first in the spring of 1990 and second in the spring of 1991 (Appendix A contains the site visit schedule and Appendix B the interview protocol). Semi-structured interviews were held with key figures including the executive directors, financial and data managers, medical directors, day health center supervisors, the head of both nursing and social work, members of the governing board, and appropriate state staff. Each visit included a site tour, observation of day health center activities, and attendance to Intake and Assessment meetings. At two sites we were also able to attend a Board of Directors or Steering Committee meeting. To keep abreast of the sites' evolving programs and to learn about their successes and frustrations, we conducted monthly follow-up phone interviews with the sites.

This overall qualitative examination of the PACE projects is both cross-sectional and longitudinal. We have addressed both questions of variation across organizations and questions of change. The reader should bear in mind that comparisons are being made among sites at different stages in their development and against a parent model that has been 20 years in the making.

Candidate Criteria

A principal objective of this study is to identify the cardinal elements in the On Lok approach. This can be done by a combination of induction and deduction. As part of its training components for the replication sites, On Lok has specified a model based on seven underlying principles (Van Reenen et al., 1989):

-provider assumption of risk,
-integrated funding,
-continuum of services,
-service integration through consolidation,
-control of services delivery by a team,
-focus on the frail elderly, and
-community involvement

Each of these criteria will be explored using a combination of hard data, anecdotal evidence, and direct observations.

Provider assumption of risk

The core of the On Lok approach is capitation. The cardinal principle for the PACE sites is the assumption of risk by the sponsoring organization. A number of factors might affect a site's ability to assume financial risk, including

the total negotiated capitated rate, the site's ability to negotiate favorable contracts, the site's information management capabilities, and the dedication of resources from the sponsoring organization.

The PACE sites are directed toward the care of elderly Medicaid clients at risk for admission to nursing homes. Most participants are dually eligible for both Medicaid and Medicare although some sites, particularly Portland, have small populations of private pay fee-for-service participants (that is participants who are eligible for Medicare only) and others (Columbia, El Paso, Chicago) have groups of participants who are Medicaid eligible but may not be eligible for Medicare. The financing for the PACE projects, once capitated, comes from a pooling of Medicare and Medicaid funds, with a larger share coming from the latter. Based on Gruenberg and colleagues (1989), work developing a cost model for "nursing home certifiable" persons, the Medicare program established that its reasonable share of the capitated rate would be equal to its average adjusted per capita cost (AAPCC) for the geographical area of the site multiplied by a frailty adjustment of 2.39. There continues to be serious controversy over the 2.39 frailty adjustment because Gruenberg calculated 2.42 as the reasonable multiplier and HCFA considers the difference between this and the frailty adjuster used as Medicare savings. Table 2 shows that this component of the rate ranges from $1200 in the Bronx to $500 in Columbia.

By state agency account, developing the Medicaid rate has proven to be more difficult and varied. Each state must select an appropriate comparison group for the PACE participants. Some have decided to compare the participants to clients who are living in nursing homes while others, especially under the influence of the recent wave of alternative care waiver grants, elected to use "nursing home eligible" clients who are being cared for in the community as the point of comparison. For the most part, the Medicaid capitation rates were developed using some ratio of community care clients to nursing home clients. When the comparison group is nursing home clients, the states must decide the specific part of the range of nursing home clients the PACE participants most resemble. Once having established a comparison group, the states then determined the average Medicaid costs for the selected client population.

Because of the heavy involvement of long-term care and the possibility that all participants may not be eligible for Medicare, PACE is largely a Medicaid-financed program. The Medicare share of the total capitation cost ranges from 23% in the Bronx to 43% in Chicago. The state's portion (usually half of the Medicaid component) comprises a large share of the total payment. During the first three years of capitation, the risk-sharing arrangement divides proportionately between Medicare and Medicaid that part of the risk not covered by the site. This arrangement taxes Medicaid (hence the state) heavily although the cost overruns are most likely to come from hospital care. This anomaly creates concern for some of the Medicaid programs.

Total capitation levels run from generous ($4830 per month for the Bronx) to conservative (Denver and Portland at $1885 per month). This

variation reflects several issues such as a state's use of community-based long-term care or its willingness to help a site build up a risk reserve fund. For example, Oregon's long-term care system has been effective in relocating and maintaining nursing home clients in the community, thereby reducing the overall long-term care cost. Portland's capitation rate, consequently, reflects this use of community-based long-term care. On the other hand, although it has a history of extensive use of home care, South Carolina uses a strictly nursing home comparison group. Wisconsin, knowing that the almost $2900 per month capitation rate is generous, is allowing the Milwaukee site to amass a risk reserve fund. Conversely, Massachusetts is requiring the Boston site to return any savings they incur over 5%. So far, no state offers outlier protection beyond the risk-sharing arrangement noted.

On the one hand, those sites with large sponsoring organizations, for which the site's costs represent only a very small increment of effort (and budget), are more likely to benefit from cross-subsidization or to receive services at cost allowing the site to more readily build reserves from operating funds (see Table 2). On the other hand, these sites may also have burdensome administrative costs charged against them. When the PACE project represents the largest component of an organization or is the sole activity for a free-standing independent corporation, no such support is available and much more precise budgeting and planning is needed. Sponsoring organizations such as those in Boston, Bronx, and Portland have and from all evidence continue to cross-subsidize site operations reducing somewhat the pressure to live within their capitated budget. Only in Wisconsin does the site rely on state willingness to provide some cushion in the critical early phases, others look to other external support such as foundations to offset losses both in the early stages of development and during the first part of capitation. Those organizations created expressly to operate a PACE site are especially vulnerable to both fluctuations in risk inherent in daily operations and particularly to delays in going capitated. For example, Chicago, under its current fee-for-service arrangements for adult day care, transportation and homemaker/chore services, brings in only $21,000 each month--enough to cover only half their payroll. Denver estimates that, once it gets the last of its service components in place, it will lose $56,000 for each month that it operates without waiver money.

Based on sites' experience thus far, they have not been successful in convincing contract providers to share the risk of serving this population outright. The PACE projects have limited clout with hospital and nursing homes because they have small enrollments and work to minimize institutional use. However, there are two scenarios, where a contracted hospital might share the risk of inpatient care costs. Table 3 shows that four of the sites (Boston, Portland, Columbia and Denver) have negotiated fixed daily rates ranging from $650 to $900 rather than DRGs for inpatient care and if they can shorten length of stay and are proficient at employing other less costly post-hospitalization services (essentially outperforming DRGs) the hospital will receive a smaller total payment than they would if DRGs were used. On the other hand, the hospital that the Bronx has established a contract with has agreed to use the DRG rate structure and will share the same risk (or perhaps even a greater risk

because of the frailty of these clients) as it would with other patients. The best deal negotiated is the contract that Milwaukee has with its designated hospital which allows for a $3280 per discharge rate arrangement. Although this is actually a rate structure used by Medicaid to pay all hospitals in the state, allowing the PACE site to fall under the same rate structure is particularly advantageous in light of presumed frailty of the participants in comparison to the typical Medicaid population. According to the site, this unusual arrangement will change in the near future as the state is expected to move to a DRG-like rate structure that takes the particular diagnosis of the client into account when paying hospitals.

Aside from favorable rates, some sites have stipulated in their contracts with hospitals that all their participants be cared for in the same ward or floor (Boston and Portland). In a show of support, Boston City Hospital, with whom the East Boston site contracts, was willing to commit part of its staff to several days of extensive training from the site and other staff from the hospital's own geriatric program.

The nursing home per diems range from $54 per day for intermediate care in Portland to $170 per day in the Bronx (see Table 3). Generally the rates negotiated by sites are somewhere around the average Medicaid rate. In Columbia, the Medicare per diem is used. Arrangements have been made for Milwaukee participants to "jump the queue" if there is a waiting list for the nursing home with which the site has a contract.

Successful assumption of risk requires utilization and cost controls for expensive services. Cost controls will require attention to both the unit costs and the utilization. The latter requires an information system and an ability to influence providers. Anecdotally, sites seem intent on following the On Lok directive about keeping the on-line service providers from focusing on the costs of services; but some means of monitoring the use of contract services is needed. There is some variation among sites as to who does the monitoring, what are done with the data, and how it is collected (aggregate or by patient). The philosophy of the primary care physician is critical here. Not all doctors are equally comfortable relying on ambulatory management. The other control is early discharge from hospitals and nursing homes. Some sites have already developed mechanisms to keep close touch on the progress of participants in institutions to look for opportunities for early discharge, but most have not. Most sites are only now getting their management information system up and running and it is too early to know how effectively its being used. At present, most sites report that they are relying heavily on the broadly held ethic against institutional use as their main line of defense against excessive spending. Others are developing, with experience, their own system for flagging patterns of high cost patients, providers, and services.

Integrated funding

Under capitation, the PACE projects are dually funded by the federal Medicare and federal and state Medicaid programs. By combining funds from

these two sources into one pool and receiving special waivers, sites are able to offer a much wider variety of services without the coverage restrictions that usually beset these programs. This flexibility allows staff a much greater level of control over the participants' care and service expenditures. It should support a philosophy of prevention by encouraging more primary services in the hopes of delaying or avoiding more expensive care later. The El Paso site's need to capitate only the chronic care, Medicaid-funded portion of services during the first year and not assume risk for the acute side until the second year raises some important questions. The idea of integrating the Medicare and Medicaid funding streams is appealing. Resources captured from the acute care side, traditionally a Medicare responsibility, can be used to expand the ongoing, community-based services necessary to keep people in their homes and out of nursing homes. Tampering with this arrangement may result in a loss of one of the distinct features of the On Lok model.

Continuum of services

On Lok is able to control services by delivering the majority of outpatient services directly and by contracting only for inpatient hospital and nursing home care and specialty medical services. To insure the continuity and quality of care for contracted services, On Lok maintains close communication with the contract providers and monitors a participant's care directly when anyone needs inpatient services.

As the sites are capitated, they offer the full array of services available for participants using different approaches to providing and contracting for services, depending on their initial and subsequent strengths and the availability of services in the community (see Table 3). Most (like On Lok) will contract for inpatient hospital and nursing home services--Portland and Columbia contract for hospital services with their sponsoring organization. All four of the capitated sites contract for nursing home care. On Lok provides home health services directly, whereas several sites do (Milwaukee) or will (El Paso) contract for this service. Eventually, Milwaukee hopes to incorporate this service component into their own in-house program. While proving to be somewhat difficult and expensive, even in its pre-capitation phase, the Milwaukee site has been able to negotiate favorable contracts getting 7-day/24-hour coverage with no minimum units of services. They also maintain some control by designating their workers. Sites generally plan on contracting with outside vendors or with their sponsoring organizations, if available for services that require expensive capital such as pharmacy, laboratory, transportation.

Prior to capitation, the patterns of service use look quite different from what they are once the site assumes risk for the participants' care. The precapitation configurations of the sites reflect available funding, service environment, and the sponsoring organization's emphasis or the stage of development. Based on site accounts, the transition to capitation was easier for those sites whose precapitation phase more closely mimicked the practice patterns of capitation. For primary care this means having as many participants as possible under the care of the site physician--only Boston and Milwaukee

required this of all their participants from the beginning. The task in the former two sites is made easier by the fact that many participants in Boston receive primary care from the sponsoring organization's clinic, and in Milwaukee from the City Health Department clinic that is located upstairs from the adult day health center. Prior to capitation, the other sites brought participants under the care of site physicians more slowly.

An important piece of the continuum of services offered through the On Lok model is supportive housing including housing that brings together participants with needs for care into closer proximity, and housing that can be used as a transition from hospital back to the community and for respite. Sites were expected to assess the adequacy of community housing in the early phases of their project and develop resources later if necessary. Prior to becoming a PACE site, Boston designed and developed housing with the intent of locating their adult day health center there. Several sites (Bronx, Denver) have strong ties to housing resources by either having their day health center located in senior housing or by their sponsoring organization's involvement in other housing activities. Although Denver has yet to recruit any participants from the private pay senior housing where it is located, seventy participants live in Beth Abraham (the Bronx's sponsoring organization) housing and Boston has a number of participants living in its sponsor's Section 202 housing (and hope to recruit more) which allows these sites some control. In other sites a number of the participants enrolled use some type of supportive housing or other alternative housing sources though not through the resources of the site. In Portland, 60% of the participants live in adult foster homes--a widely used community care alternative in the State. Here, the site negotiates, on a case by case basis, the extra care costs it is willing to pay the foster home. The site feels that cooperation of these homes varies greatly and so it plans to open some of its own adult foster homes in the near future.

During the precapitation phase, most sites believed that, although transitional housing is an integral part of the model, it does not work without the availability of both the day health center and the clinic. Therefore, these services were developed first and the housing component was to follow. Now, the capitated sites are realizing that transitional housing is an even more urgent need that originally thought. Sometimes sites wind up using nursing homes when participants could be better served in specialized housing. On an even more basic level, Columbia, which altogether has no access to housing resources, has come to realize that many of their participants live in substandard housing (e.g. without electricity) or where there is major physical and emotional neglect and that no matter how much progress they are able to make with participants in the adult day health center, they cannot overcome these living situations. Columbia has made housing a top priority during its first year of capitation and as a stopgap has even shown some willingness to subsidize the cost of private apartments to keep participants out of more expensive institutional care.

Service integration: the centrality of day health care

As discussed earlier, five sites have been approved for waivers and have the principal components (day health center, in-home services, primary care, inpatient care) of the model in place; four have begun capitation. The Bronx has its waiver approved but over a year later has still not signed a contract with the state. Based on both anecdote and direct observation, these five sites are operating fully integrated programs, although the fifth (Bronx) continues to work towards integrating its programs so that they no longer seem physically and intellectually parallel. Up until now, the Bronx's program resembled a home care model trying to incorporate day care rather than an integrated model.

On Lok emphasizes the day health center as the primary delivery setting. The financial viability of the model relies, in part, on trading off the more efficient services of the day health center with in-home services. Although most sites have attempted to follow the On Lok template quite closely, there is some adaption to local conditions. In New York and to a lesser extent in Massachusetts and Illinois, long-term care clients receive very generous home care benefits. Many elderly clients in these states are reluctant to give up any of their home care benefits in exchange for the promise of receiving more comprehensive care provided in an adult day health center. Rather than risk not having sufficient enrollment and money to sustain the site's operations, some sites (Bronx and Boston) are considering different configurations of care provision--moving somewhat away from the strict day health center approach. Table 4 shows that less than half of the 300+ participants in the Bronx attend the day health center although all those who enroll in the capitated program will be required to attend. Many of the potential clients in Boston have been spoiled by the depth (nurse practitioners and physicians on the home care team) and breadth of the sponsoring organization's home care program, deterring recruitment from the home care program to the PACE program where day health days are consciously traded for home care hours. The other sites with less reliance on home care bring their participants into their day health centers more than twice a week and sometimes up to four times a week as is the case with Columbia. Table 4 also points out significant differences in the average hours of person care used each month by participants. Part of this variation is attributable to the fact that Portland includes personal care hours performed by adult foster care workers. Other differences could be associated with differences in the richness of the service environment or differences in service definition.

Some sites report that another obstacle to using the adult day health center as the primary care setting is the lack of development and acceptance of adult day health (or even the more well-known adult day care) as a mainstream long-term care option in some states, especially Texas. Unfamiliar with such services and often unwilling to leave home, elderly clients shy away from joining a program that requires day health attendance or confuse it with simple social day care. Indeed, attending the day health center is a significant barrier to enrollment.

Apart from client resistance, there is also some anecdotal evidence of site resistance to emphasizing the day health center. Although several of the replication sites are located in major cities, none enjoy the same concentration of participants or manageable service area found at On Lok. The size of the catchment areas, driven in part by a need to capture a sufficiently large potential pool of clients and sometimes by other bureaucratic mandates, may prove unwieldy. Some have found transporting a large number of frail elderly people from the homes into the day health centers to be both difficult (for staff and participants) and costly. While the Bronx is the only site thus far that does not require all participants to attend the day health center, at least one other site is reconsidering this emphasis in light of transportation cost issues.

The emphasis on the centrality of the day health center was intended to make it a focus of activities. Although each site has developed a day health center, its degree of integration into the other activities varies. In some cases, the center was observed to be more a co-located, but independent activity. The staffs interact little and the programs are not merged. There is more sense of independent activities in which the patients are temporarily removed from day care to undergo treatment. In other sites, where the integration works well, the clinical activities are very much a part of the daily routine. Physicians see patients during their normal activities. Day care workers look for changes in physical functioning. Nursing staff and social workers share in routine care activities. Denver has even started rotating health aides through both the day health center and home care programs so that they are aware of the challenges of providing care in each setting and can gain appreciation of such.

To strengthen the integration of services, On Lok also requires participants to come under the care of the On Lok physicians. Unless community physicians become part of the PACE staff (not usual), this means clients must give up their regular primary care physician. Several capitated sites report that this has proven a problem and it appears as though this will be a problem in Bronx and Denver too, exacerbated by the reluctance of some of the participants' current physicians to relinquish care. This is less a challenge in states where alternative delivery systems such as HMOs are well-established, or where patients have not been under the consistent care of any one physician prior to enrolling in the program. Because PACE is specifically directed toward a dually eligible Medicare/Medicaid population, many potential clients have been treated in clinics and other settings where they see a different physician at each visit.

Team work and turnover

At the core of On Lok's service management system is the multidisciplinary team. The team, consisting of nurse, social worker, physician, and others is responsible for assessing each participant's care needs; developing individualized plans of care (including relative need of adult day health, in-home, medical and social services); delivering and/or arranging delivery of services; and providing ongoing monitoring of quality, costs, and

treatment results. A system of both formal and informal mechanisms is in place to allow for the exchange of ideas and information about participant care. Considerable staff time is devoted to formal meetings at On Lok. There are three kinds of formal meetings: regular intake and assessment for new participants upon enrollment and old participants once each quarter, special intake and assessment meetings for participants who have suddenly experienced significant changes in health status or in social environment, and daily morning staff meetings to briefly discuss progress of participants scheduled to attend that day. Each week these meetings account for about eight hours of each staff person's time. A great deal of effort is made to enlist the paraprofessional as well as the professional staff in the discussions of participant status and change.

One way of looking at the role of the team is to examine its structure. Some teams were observed to operate with a formal structure that clearly defines a leader and uses a hierarchical organization in which each member knows his or her place. Such activities are usually associated with specific role descriptions and responsibilities and formal adherence to professional boundaries. The implication here is that the input from those members holding positions of greater authority or prestige will be thought to have greater value than the input from others. The opposite pole would be a loosely configured group with little evidence of who is in charge and no clear expectations of role distinctions. Here one would expect the balance of power in decision-making and care-planning to be more equally distributed or to vary from one case to another. The On Lok goal lies somewhere in between. There is some indication that the different sites have developed different patterns of organization with varying levels of comfort in working across professional boundaries.

The continuum of care available to PACE participants implies a blending of the professional interests and approaches of varied disciplines. In practice, the relative power of the different professions will vary from site to site (see Table 5). Even in these early stages of development, one can often observe a flavor from a dominant profession. We looked for indications that a particular profession was leaving its imprint on each site--usually the discipline of the adult day health director or the majority of staff established the style of the site. This domination usually stems from the parent discipline of the site director and may be further exaggerated by the pattern of staffing backgrounds then selected. Too much should not be made of this phenomenon, especially where role distinctions are not emphasized; but it does lend an ambiance and a distinct aspect to some sites. In the main, the dominant professions seem to be either nursing or social work, both highly relevant to the nature of the activities carried out.

Both the composition and the longevity of On Lok's multidisciplinary team make it an effective operating group. Emulating such a record is more difficult. Much work is required to build this level of teamwork and interdependency. As can be seen in Table 5, several sites have faced high levels of turnover among their staff since their programs were initiated. There is

little hard evidence about how this has or will affect the overall program operations. High turnover could have a deleterious effect on the remaining staff as well as on the participants' continuity of care. Some turnover, especially of staff that do not fit in or who do not share the site's philosophy, may not present a problem, but steady turnover of key staff members might present more serious problems such as diminishing the site's ability to control costs because many of the important changes in practice style necessary for this model are developed through experience.

Most of the turnover has occurred in two positions: adult day health center director and staff physician. Five of the sites (Boston, Portland, Milwaukee, El Paso, and Chicago) have had to replace center directors. El Paso and Milwaukee are both on their third center director. Sometimes the adult day health center director's duties are particularly ill-defined and ambiguous. Most sites believe this role requires both administrative and direct service delivery skills. This left at least some of the former directors feeling intermediate between the on-line staff and the administrative staff. Part of the solution to retaining staff in this position might be to more clearly define job descriptions and lines of authority and to lessen the distinction between administrative and hands-on staff. Generally, the sites have not resolved this dilemma but rely on trial and error to find the right match.

There has been physician turnover in four sites (Columbia, Milwaukee, Bronx and El Paso) with the Bronx losing both its original medical director and staff physician. The demands for practice in a very different model have made recruitment and retention of physicians problematic for the sites. Most physicians are likely to be uncomfortable working in a milieu where medical skills are not immediately recognized as the pre-eminent elements and extra deference is not paid to their rank. PACE physicians need to be skilled and comfortable in managing chronically ill elderly participants and practice aggressively enough to manage them outside the hospital. They also need to be able to work as members of a multidisciplinary team, in which decisions are made by the group. Finally, since there are strong incentives to control resources, the physician must have the ability to work within an environment that requires strong oversight. This combination of characteristics is not easy to find, and even more difficult on the modest salary scale usually offered by these projects. When a physician is not able to work successfully in this model, sites do not consider physician turnover detrimental.

The sites have been able to attract motivated, competent medical staff to provide primary care to the participants. Each site has strong ideas about what it should look for in recruiting their physicians. Some sites believe that only younger physicians have the flexibility needed to adapt to this type of practice while others fear that lack of experience results in a reluctance to manage participants outside the hospital and a tendency to "over-medicalize" patient problems. Therefore, some physicians come with a strong community background or have specialized in working with the elderly and others come directly from residency programs. Once part of the program, the physicians appreciate that this is a better model in which to serve clients and find their

practices to be satisfying because they are in a better position to observe and coordinate their participants' care and to understand the multiple aspects of the participants' care. Nevertheless, they are also keenly aware of the isolation that this type of practice can have in the early stages when they are the only physician on the team or are just one of two. The net result of the advantages and disadvantages of this type of practice is that only half of the sites have retained their original physicians.

Table 5 shows that a few sites have relied on medical school or teaching hospital affiliation as a way to overcome physician isolation and to provide other recruitment incentives, but they report that this arrangement may create divided loyalties and mixed responsibilities. In some instances, staff physicians often divide their time between the PACE site and other positions (e.g. nursing home medical director, Alzheimer's disease research) to combat feelings of isolation but also because sites are financially unable to fully support them. In some sites, the medical director acts as staff physician for at least part of his/her time. This can be even more difficult because it means the medical director must face the same issues as the staff physician plus the added responsibilities of oversight and management of the medical advisory committees (ethics, quality assurance/utilization review, technology).

Two sites still in their pre-capitation phase (El Paso and Chicago) are having particularly troublesome times developing the primary care aspect of their service package. For El Paso, a lack of qualified medical staff, low volume, and financial constraints (despite funding from Robert Wood Johnson and numerous other sources) present obstacles. They have brought on part-time a retired family practitioner to do health histories, quarterly assessments, and basic screening but it appears as though his practice patterns run contrary to the model in a variety of ways In Chicago, money seems to prevent the site from bringing on the two physicians that are working with the site. For now, these physicians see participants in their private offices without compensation while the volume of patients is low.

To a lesser extent, there has been turnover with the key line staff (nurses and social workers). Again, trial and error seems to be the modus operandi in finding suitable people to fill these positions. Milwaukee has created career ladders (albeit ones with limited rungs) for nurses and social workers as an incentive and is also attempting to offer more competitive pay scales.

Focus on the frail elderly

On Lok targets a very specific high-cost long-term care population who would otherwise be very likely to enter nursing homes. For example, the average On Lok participant is 81 years old and has five medical diagnoses. Half of the participants are incontinent and 60% have some level of cognitive impairment. Participants must be ICF or SNF eligible based not only on medical needs but also on therapy or social work needs. California's general guidelines provide that the client must have a mental or physical impairment that requires access to 24-hour supervision by skilled or non-skilled staff and

with skilled nursing available during the day. These Medi-Cal criteria are vague but this subjectivity is not altogether unusual when looking at the state eligibility criteria for the other sites. Once On Lok participants are deemed eligible, they retain that status regardless of changes in their condition.

At the same time, numerous studies have shown that eligibility for nursing home care and actual use of these facilities are not well correlated. Many "alternative care" projects have faltered on just this criterion. Efforts to reduce nursing home use have proven less effective than expected when compared to control groups in randomized trials (Weissert, et al., 1988).

A comparably frail elderly population should be targeted by the PACE sites. Table 6 compares the frailty of participants in eight sites to On Lok on the need for supervision or more complete help doing six activities of daily living (ADLs) in the first quarter of 1991 based on DataPACE reports. Also contrasted is the prevalence of dementia among these populations based both on physician evaluation and MSQ scores--two measures that do not necessary agree. Notice, for example, in Columbia the low prevalence of dementia as reported by physician diagnosis in comparison to the percentage of participants who answered less than five out of ten MSQ questions correctly. This discrepancy has been attributed to data entry error and is currently being corrected. From this table, we also see that there are substantial differences among the sites with On Lok occupying an intermediate place along the continuum of need. At least part of this variation can be attributed to the fact that each of the eight states in which the sites are located have responsibility for setting functional eligibility criteria for the PACE programs and can dictate whom they feel is and is not appropriate for this type of care. All must meet state nursing home certification at either SNF or ICF level. An overly lenient or overly strict eligibility standard for functioning might distort (either positively or negatively) the site's ability to manage participants and to stay within the capitation rate.

Table 7 shows the variation in the established functional eligibility criteria among the states. Each state has its own assessment form and its own cutoff score. For example, Massachusetts seems to use a fairly generous standard although one reported to be tightening. It has determined that an elderly person who has at least one medical or mental impairment and at least one ADL deficit, and who needs at least one skilled services at least three times a week is eligible for the program if they are also financially eligible. Unlike several other states, Massachusetts does not have a specific score on an assessment instrument that the client must surpass, it uses a more subjective review of the assessment tool by an RN. Several states fall at the other extreme, such as South Carolina and Oregon. South Carolina requires participants to have either (1) a medical condition which requires daily monitoring and a functional deficit (2) both a psychobehavioral and a functional deficit, or (3) a high level of ADL dependency. Participants needing assistance with at least four ADLs or who are dependent in at least one ADL are eligible for the program in Oregon. Of concern to some sites (Denver, Columbia) is the tendency of scoring on functional assessment instruments to screen in clients with dementia. When it is

relatively easier for demented rather than non-demented clients to become eligible for these programs, the day health center takes on a different quality to accommodate the particular needs of this population.

Table 7 also shows that financial criteria are more uniform across sites than are functional criteria; but there is still substantial variation. Several states (Oregon, Wisconsin, South Carolina, and Colorado) allow participants to have incomes up to 300% of the federal poverty level (or $1008 per month). This standard is comparatively generous in light of the fact that three of the other sites do not allow participants to have incomes over $336. With these stringent income requirements, some sites in their pre-capitation phase, allowed privately-paying participants to join their programs. Once capitated, most of the sites' private pay participants disenroll. Those sites with the highest Medicaid capitation rates retained the fewest private pay participants (sites are required to charge the same rate to both Medicaid and private pay participants). Because they have seen a market for fee-for-service adult day health, the Oregon site, which had the greatest percentage of private pay clients prior to capitation, wants to develop a program that caters only to the private pay client and is also actively pursuing a wider range of payor sources such as managed care plans to finance the private pay individual. Other sites (Massachusetts and New York) also hope later to add fee-for-service arrangements to take advantage of these markets. Columbia must contend with up to 10% of their participants who are eligible for Medicaid but not Medicare. They receive only the $1628 Medicaid capitation portion for these participants but have asked the State to reconsider this arrangement.

The stringency of eligibility criteria has some implications for the size of the potential market of an area but not necessarily for the approach used to attract clients. On Lok has developed a marketing strategy that is well-defined but simple in order to target this atypical population. Most of On Lok's potential market are frail elderly Chinese. Typically, they are homebound and few speak English. The staff have found targeting adult children who have taken on the decision-making role and community-based programs with no incentive for keeping the client at a particular level of care to be the most effective strategies. Most of the replication sites, on the other hand, are just now beginning to show evidence of a well-articulated marketing strategy and consequently have been only marginally successful in attracting participants. Table 8 summarizes some of the differences in marketing activities. The level of development and the delineation of a clear marketing strategy varies considerably. Several locations face heavy competition because the area is saturated with providers offering seemingly comparable services--seven of the eight states have Medicaid 2176 home and community-based services waiver for the elderly.

Based on information from at least the last six months, the PACE sites report local Medicaid case management agencies, other providers such as health clinics and hospitals, and word of mouth as their three primary referral sources (see Table 8) with an average between sites of over 20 referrals each month. Only two sites (Portland and Columbia) have successfully utilized the local Medicaid agencies but not without some difficulty. Because most of the

population should be Medicaid eligible, there is an expectation that agencies with the responsibility for authorizing or assigning services for Medicaid clients should be a major target of the PACE sites' marketing efforts. However, often case management agencies are reluctant to push a specific program (as opposed to a general type of support e.g. in-home service) even when other options are already overprescribed. There is some anecdotal evidence that case managers can also be protective of clients and have their own ideas about what is best for the clients. Sometimes case managers are unwilling to give up that role. The result is that sites' efforts at vigorously using these state agencies for referrals is often reduced to keeping the case managers educated about the program's advantages and keeping their general public visibility high.

All sites now employ full-time marketing personnel yet the marketing strategies they have developed still rely heavily on meetings and presentations with a wide variety of constituencies. Much expense has gone into brochures and other audio-visual materials with little evidence that such aids make any real difference. Nonetheless, they do provide a sense of tangibility that a new program is available. When queried, most sites do not appear to have distilled the key selling points from the complicated details of the model in order to present the model's precepts in positive terms. For example, the model provides a chance for participants to see physicians and be checked by nurses on a frequent basis; the program is client-centered and provides opportunities for participants and families to be at the core of decision-making; an integrated team approach is used; and the model offers a specialized geriatric focus.

Prior to capitation, at least some of the sites' marketing problems stem from the ambiguity between what they can offer at the time the potential client is approached and what they will ultimately provide under capitation. They are trying to market a program that is evolving and promises of future service packages are more difficult to sell than the full complement offered once the site is capitated. Additionally, when not yet capitated, sites must sell funding arrangements that are expected to change (i.e. from fee-for-service to capitation). Patients recruited under one set of assumptions may not be willing to meet the more stringent requirements of capitation. Once capitated, sites face another set of issues in getting present and future clients to enroll in the capitated program. Figure 2 shows the net enrollment figures reported by the four capitated sites. Net enrollment is the number of persons enrolled after new enrollees and losses from death and disenrollments are added together. Enrollment has proven to be more problematic than most sites anticipated, certainly more difficult than their applications forecast. None of the first four sites to go capitated achieved the enrollment level of at least 120 participants that On Lok's standardized work plan specified. Indeed, fewer than 2/3 of the initial patients rolled over from any of the pre-capitation programs. Columbia rolled over the most (76 participants) among the four.

Figures 2 and 3 shows the net census figures for the four capitated and four non-capitated sites, respectively. Only the Bronx, which began with a previous study that produced almost the minimum complement of enrollees needed, appears as if it will achieve anything near its goal of enrollees. Growth

rates vary widely, depending in part on starting points and the ability to offset participants lost to death and disenrollment (see Table 8). The Bronx and Boston have capitalized on the populations of their sponsoring organizations. For example, the Bronx has a current census of 310 participants most of whom rolled over from a previous demonstration of coordinated long-term care. Others (El Paso and Milwaukee) face real difficulties cultivating a market of their own or attracting the appropriate clients away from the strong alternative programs run by their sponsoring organization (Boston and Bronx). Maintaining a capitated program depends on steady enrollment to continue building a risk pool sufficient to spread costs across.

The lower than expected enrollments underline the need for active marketing. Table 8 also identifies some of the problem areas capitated sites mention they have encountered in marketing. Anecdotally, the sites report that there are essentially three major barriers to enrollment in the PACE program: changing physicians, changing hospitals, and attending the adult day health center. The Columbia site feels that the only people willing to give up their physicians are those desperate for care. Both Milwaukee and Boston face problems getting their people to join because they do not want to go to the hospitals with which the sites contract because these hospitals have reputations for largely serving indigent populations. Portland and Columbia face similar objections to changing hospitals but for reasons unrelated to the reputation of the hospital and more because the potential participant simply does not want change. In contrast, Montefiore, the hospital that the Bronx site intends to contract with for inpatient care, is thought to be a strong inducement to enrolling in the program. Finally, attendance at the day health center in Milwaukee, Columbia, and Boston presents a barrier to enrollment. Only in Portland, where adult day care is a mainstream mode of receiving supportive services, has attending the day health center not been sited as an obstacle to enrollment. As noted earlier, Boston has partly responded to this problem by reducing its required attendance to only once every month. The Bronx avoided the issue of adult day health attendance altogether by not making day health attendance mandatory--only half of its participants are brought into the center on a regular basis and usually to see the physicians or to receive special services.

Because some state functional eligibility assessment tools tend to screen in cognitively impaired clients, the prevalence of dementia among participants and the concomitant changes in day health center ambiance may become another barrier to enrollment but it is still too early to tell. Regardless, sites are sensitive to the many issues surrounding care for the cognitively impaired and the need to be equally considerate of the cognitively intact participants.

For some, the unbridled enthusiasm for the model has lessened because there are so many unanticipated difficulties simply getting people in the door. Indeed, the effect of these recruitment problems are numerous. The slower than expected enrollment raises several questions; one being what is the meaning of the 300 participant requirement? Is 300 the number participants that On Lok feels is necessary for sites to breakeven financially? If so, does a lower target take into account catastrophic cases or is it simply breakeven under normal

operational circumstances? Few of the sites realistically expect to reach 300 by the end of their waiver phase-in period and some are altogether reconsidering the requirement that they have 300 participants. Part of the ensuing discussions have included an examination of what size risk pool is necessary to adequately cover the risks associated with acute catastrophic cases and how the sites might join together to reinsure against these outlier cases collectively.

Community involvement

A final tenet of the On Lok model is the emphasis placed on the centrality of the community. This concept includes both keeping participants in their own community and encouraging the ongoing involvement of the community (particularly the family) with On Lok. Most importantly, there is a high expectation for the family to remain active in the care-planning as well as the actual care of the frail elder. On Lok has also maintained an active presence in the community by sponsoring joint projects with local schools, supporting a volunteer program, providing community education, and holding regularly scheduled open houses for both participants and their families and the community. These activities serve a dual purpose as they are also effective outreach efforts.

The PACE sites have likewise used community resources in different ways. Sites vary in their use of volunteers. Some have made extensive use of them, while others have not. The Chicago site, although now an entirely separate corporation, evolved from a sponsoring organization with deep roots in the community and has therefore quite naturally fallen into the role of keeping the community aware and involved in their project. Others use volunteers for various activities in the day health center.

Other variables that may affect performance

In addition to the seven cardinal elements of the On Lok model, there are a number of critical factors that may effect the performance of the replication sites or at least the way in which the sites interpret the On Lok model. Unlike the cardinal elements, differences among sites along these other criteria are expected.

Sponsorship

The eight PACE sites represent a range of different communities, service and funding environments, and organizational auspices. Two (Columbia and Portland) are hospital-based programs; another (Denver) has roots in a private hospital but is now a totally independent corporation. Boston is based in a neighborhood health center and the Bronx has a nursing home organizational sponsor. The Milwaukee and Chicago sites grew out of community organizations, while another (El Paso) is a new agency altogether. Denver and Chicago both are now both completely separate corporations, however. These

different sponsors represent, in turn, different levels of experience with long-term care and capitation. These differences are reflected in Table 9.

According to sites, those sponsored by large organizations have looked to their sponsors, especially the hospitals, for a great deal of formal and informal assistance. The latter includes free or subsidized services such as accounting and legal work, as well as supplies and assistance with construction and renovation. This cross-subsidization has continued through the early part of capitation as well. The smaller organizations have had to struggle to raise funds in the community to pay for many anticipated and unanticipated costs. Moreover, as noted earlier, the shaky financial base of these independent organizations makes them barely able to sustain any delays in start-up much less survive the costs of catastrophic cases early in their operation. With the exception of Milwaukee, where active state support has provided special exemptions to allow them to participate in a state demonstration project, and the Bronx, the pre-capitation income generally made available under fee-for-service arrangements has been sparse.

On the other hand, being the program of a large organization can exert other influences. Such projects are usually not the center of attention and may get caught up in the bureaucracy of large organizations. Simple tasks can thus become major ones. Although one might expect a conflict of goals, being a hospital-based site does not necessarily create barriers to minimizing hospital use. Because the site's service needs are not large enough to make a significant difference in any hospital's budget, sponsoring a PACE site seems to be more an effort at diversification and general marketing than an effort to develop a feeder system. Indeed, the Sisters of Providence who are the corporate sponsor of the Portland site, have made it part of their long-range strategic plan to build more PACE sites. Their intent is to change their reputation from being that of a chain of hospitals to being providers of comprehensive health care including long-term care and congregate housing. The hospital sponsors seem tolerant of subsidizing site activities in different ways and to developing service contracts that will essentially provide care at cost.

A few organizations operate long-term care institutions. The Bronx site's organizational sponsor is a skilled nursing facility and the hospital sponsoring the Portland site has skilled nursing beds in its facility. In both cases, the PACE sites have looked elsewhere to set up contracts for nursing home services because their sponsors cannot offer them competitive rates. The Bronx plans on using its sponsor occasionally for transitional or respite beds.

By all accounts, those sites without a large sponsoring organization (Chicago, El Paso, and Denver) are always in financial peril especially during the pre-capitation phase. Chicago and Denver, the two sites that do not have support from the Robert Wood Johnson Foundation, secured funding from local foundations to fund or offset projected losses during the early years of capitation (Denver). Because El Paso has had an elongated service development phase (refer back to Figure 1), it has needed to secure substantial funds to supplement

its Robert Wood Johnson money. For all sites, but particularly those without large sponsors, each new service location represents a major capital and staffing investment for which no immediate direct support is available, and these sites are not good candidates for traditional loans. Again, these are issues that must be considered in calculating breakeven points. As the sites look to longer term operations, there is great concern about how they will accumulate resources to both permit growth and offset the high risks associated with this population.

State support

There are several reasons why a state might be supportive of the PACE program: because the state is interested in cutting-edge, innovative long-term care programs; because they believe managed care (of which PACE represents a comprehensive model) is the wave of the future; because they think this program will save the state money; or because it brings prestige and/or outside resources. Support can be seen in the setting of capitation rates as well as establishing functional and financial eligibility criteria, the availability of outlier protection, and willingness to refer clients to the program. Because the majority of operational funding will come from Medicaid, state support is critical in predicting the success of the individual sites. As discussed earlier, there is great variation among the sites in the Medicaid portion of their capitation rates.

The state also determines the functional and financial eligibility standards for each site's participants. A lenient functional standard allows sites to build risk reserves by serving some clients who are apt to require less expensive services. To balance this with the need to control costs, the four states with the most generous functional criteria also have the most restrictive financial criteria.

Beginnings of interest in making managed care an integral part of the Medicaid structure are now evident in several of the states (Massachusetts, New York, and Texas). PACE represents one approach to this strategy although it is more comprehensive than what is usually envisioned for just long-term care. Managed care may be driven by a desire to provide fuller, more comprehensive, unduplicated services to publicly-supported clients, but it is primarily the approach to strong fiscal imperatives. Thus, care represented by the PACE program may not offer the savings being sought by states particularly when the state is in a fiscal crisis. The fiscal pressures to reduce the Medicaid service package in a perverse way benefits enrollment efforts of the PACE site by making its service package appear more attractive.

State support of the PACE project is probably strongest in South Carolina and in Wisconsin. In South Carolina, the Department of Health and Environmental Control (although not the primary long-term care agency) is one of the site's organizational sponsors, and there has been cooperation (such as sharing the names of people on waiting lists for waiver services) between case management authorities and the site. In Wisconsin, where community-based long-term care is well-developed, the state is willing to establish a capitation

rate that provides for regular contributions to the site's risk reserve fund. In Oregon, the state government has enthusiastically supported community-based options including PACE but the prevalence of alternative long-term care programs plus the fiscal conservativeness of the State has resulted in the second lowest Medicaid capitation rate among the sites. State support for the PACE site may also be reflected in their willingness to simplify or help navigate the bureaucratic maze of agencies that the site must deal with for licensing, waiver and contract approval, oversight (QA/UR), and level of care determination. In New York, at least part of the site's delay in starting capitation has been the result of the intensely complicated state bureaucracy that exists. On the other hand, sites may face some resistance from their states. Support for the El Paso site or any other community-based long-term care programs from the Texas state government has been tentative although there is some indication from both the site and state agency officials that it has improved over the last year or so.

History

While it is hard to define what particular elements in the site's history would affect the potential success of a site, previous success in similar ventures would seem a good indicator of future potential (see Table 9). Only one site (Bronx) was involved in a project that closely resembles the PACE approach. Prior to becoming a PACE site, it operated a randomized experiment with coordinated chronic services, which provided a valuable set of lessons on which to base cost and operational estimates. The Boston site also operated a highly successful chronic home care program that provided, among other things, a multidisciplinary team approach and skilled staff (nurses, physicians) in the homes. For those with less direct experience, an organization's prior history in developing or being involved in innovative approaches to care, particularly in long-term care, would certainly be useful, especially programs where nurses and social workers are encouraged to manage care with an emphasis on balancing issues of safety and risk with independence and choice, or where a strong commitment to prevention has been practiced. Several sites (Boston, Portland, and Denver) build on strong medical programs for the elderly (such as clinics specializing in geriatrics or geriatric assessment), which have reached out to the local communities.

From the other pole, several sites build on a history of strong social programs, often with a heavy emphasis on case management. Columbia and Milwaukee grew out of organizations that had participated in innovative programs for community long-term care. The El Paso program was a direct outgrowth of an Area Agency on Aging long-term care program. On the administrative side, Portland has previous experience with pre-paid capitated care particularly in areas such as identifying and controlling utilization both by client and by provider as well as tracking participants in different settings.

Lessons for the next generation of replication sites

Now that four more replications sites have been launched, it is useful to review the critical lessons that can be distilled from the experiences of the first eight replication sites. Most importantly is the necessity of sites obtaining sufficient start-up funds. The Robert Wood Johnson Foundation granted close to $700,000 to six of the first eight sites with a requirement that each raise matching funds of $300,000. The financial viability of the two sites that did not receive Robert Wood Johnson funding (Chicago and Denver) has been a constant source of concern both for the sites and those interested in seeing the On Lok model successfully replicated. The transition from fee-for-service to fully-capitated program is made easier when the site, in its pre-capitation phase, offers as close to the full range of services as are available once capitated but this takes substantial capital and staffing. There is only limited availability of fee-for service dollars to fund operations making outside funding imperative. (A dilemma which is probably an anomaly exists in the Bronx where they have been running smoothly a program very close to the model but under more generous fee-for service arrangements. Beyond their perceived obligations to the replication project, there are few obvious reasons why they would choose to become a capitated program.)

The sites' financial viability is further complicated by the fact that all but one of the first eight sites have faced slower than expected census growth. When fee-for-service dollars are limited, it is even more critical that there be a large enough pool of people being served to maximize these limited dollars and to spread the significant fixed costs across. As discussed earlier, the inability to attract sufficient numbers of participants to cover costs, is the combined effect of offering, with limited marketing sophistication and experience, a "product" that even staff have difficulty defining, that is new to the consumer, and is in flux. The key to overcoming this may be in developing early both internal and external marketing strategies for maximizing enrollment and for maximizing participant rollover from the pre-capitation program.

Another vital issue involves staff. Not just issues of building teams with strong clinical skills and ability to work in a multidisciplinary approach, but in retaining staff. Staff turnover has been high particularly among physicians and adult day health center directors. For adult day health center directors, particular attention needs to be paid to finding acceptable management arrangements that clearly define lines of authority and responsibility and that capitalize on work styles and existing structures. Close attention must be paid to recruiting physicians that can practice to a standard they are comfortable with while taking the risks necessary to maintain the participants in the community. There are no strict guidelines for finding these physicians but geriatric training or a strong background in community health would be advantageous particularly where the candidate has established an ability to work in a model where medical dominance may not be the mode.

Finally, to the best of the site's ability, care must be taken in developing the right patient mix--both in terms of acuity and dementia. Sites may feel they have encountered adverse selection and that they are unable to handle the acuity of their patient mix with only limited experience while others may have purposefully selected only the lighter end of the eligible population to ease transition into capitation. Trial by fire can be frustrating to a staff but might encourage resourcefulness. On the other, serving participants that aren't particular sick allows the site to avoid difficult situations early on but does not allow for sufficient experience when the difficult decisions eventually arise. Ultimately the sites should strive for rate setting that accurately reflects and covers the risk associated with the patient mix.

A separate issue surrounds the mixing of cognitively impaired clients with those who are not. Several assessment tools used by the states to determine care needs weight heavily cognitive impairment resulting in a significant number of clients deemed eligible for the program having some form of dementia. This has strong implications for the day health center milieu and raises important questions for the replication sites. It is too early to tell if the presence of a large number of demented clients in the day health center will create for the non-demented client yet another barrier to enrollment and how different the program will look if it has to accommodate the needs of a heavily demented population. Caring for the demented client is certainly something that needs to be kept in the forefront of discussions.

Evaluation issues

There are several major issues to be considered with regard to the evaluation of this replication. The basic design will have to rely on a quasi-experimental approach, but it will be a complex one. The use of quasi-experimental designs places great weight on the ability to identify comparable groups of experimental and control subjects, but, in truth, this is impossible. Several possible strategies to deal with this problem would include: selecting control groups by using matching techniques designed to make the two groups as similar as possible; statistically controlling the two groups on a variety of measures on both status at baseline and prior utilization; and using special statistical techniques to control for the possibility of selectivity bias. Adding to this burden are the special problems anticipated because of the frail nature of the clients and the difficulty thus far faced in recruiting participants.

A problem in many studies like this one is the equivalence of the data collected from the experimental and control groups. Often, as here, the original intent is to use information collected on the experimental subjects by the experimental service providers, using a specially designed assignment tool and to use a similar tool administered by evaluation staff on the controls. This strategy raises concerns about the inter-group reliability of data collected entirely by different data collectors. At a minimum, some efforts must be made to establish the reliability by having evaluation staff re-examine experimental subjects soon after their regular evaluation is needed. The problem arises if this post hoc test of reliability demonstrates a wide gap. Moreover, important

information for both dependent and independent variables needs to be collected from the experimental group over and above that routinely gathered. DataPACE does not cover areas of importance to outcomes like client and family satisfaction and its measures of affect are limited. These items are better gathered by non-project personnel. This action would provide a ready source of information to complement the assessment by the PACE staff.

In evaluation, issues involving quality of life are as salient as those of cost and utilization. Here, again, baseline information is very important. Another area of special concern in the area of quality of life is the use of proxies. Because many clients are cognitively impaired, proxies will be a substantial source of information. It would be helpful to know how proxy responses systematically differ from those of clients. One method of testing the inter-reporter correlation might be to interview proxies of a sample of clients who are themselves able to respond.

Finally, a major concern is with questions of statistical power and the role of pooling. The foregoing presentation has pointed to a number of important differences among the PACE sites. Because each of the eight sites is quite distinct, there is some reason to hesitate before suggesting a pooled design. Concurrently, the presence of measurement error is one of the major contributors to loss of power in statistical analysis. Measurement is especially onerous for self-report data where the interpretation of the question or the interpretation of a state of mind cannot be rigidly bounded. Care must be taken to utilize models that seek to extract from the rest the reliable part of such measures.

A final issue surrounding evaluability is that of the DataPACE system--the standardized data system used either in its designed form or a modification that is then translated in DataPACE format. For many areas of interest--utilization, expenditures, etc.--the current data system seems to provide a sufficient level of detail and is maintained well at the sites. Major problems, however, arise when defining and reporting a unit of service (e.g. how much of a contact with a client constitutes a visit). This problem will vary with the type of service. Care will need to be taken in using both the DataPACE information on contacts and information on service volume based on billing data.

References

Ansak ML. The On Lok Model: Consolidating Care and Financing. Generations; Spring 1990.

Berkeley Planning Associates. On Lok Senior Health Services Community Care Organization for Dependent Adults: Case Study. mimeo, 1984.

Gruenberg L, Tomplins C and Povell F. Capitation Rates for the Frail Elderly: Final Report (draft). Bigel Institute for Health Policy, Brandeis University, 1989.

Van Reenen C, Chin W, Kunz E and Shen J. On Lok's Model of Long-Term Care and the PACE Replication Project. On Lok Senior Health Services, 1989.

Weissert WG, Cready CM and Pawelak JE. The past and future of home and community-based long-term care. The Milbank Quarterly 1988; 66:309-388.

Zawadski RT and Eng, C. Case Management in Capitated Long-term Care. Health Care Financing Administration Review. Annual Supplement 1988.

Zawadski RT and Ansak ML. Community Approaches to Elderly Care. Business and Health; November 1986; Vol 4, No. 1.

Zawadski RT. So You Don't Like the Rules: A Critical Overview of Waivered Demonstration Projects. Continuing Care Coordinator; February 1985; Vol. 4, No. 1.

Zawadski R, Shen J, Yordi C and Hansen JC. On Lok Senior Health Services: A Community Care Organization for Dependent Adult. On Lok Senior Health Services, 1984.

TABLE 1: SUPPORT FOR PAST AND CURRENT SITE ACTIVITY

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Level of pre-capitation funding (Total $)	$1,000,000	$1,444,000	$1,250,000	$1,018,000	$1,225,000	$1,734,109	$987,000	$1,005,000
Sources of pre-capitation funding								
•Sponsoring organization	$300,000	$200,000	$300,000	$20,000	$200,000	0	0	0
•Foundations	RWJ $700,000	RWJ $700,000 Other $544,000	RWJ $700,000 Other $250,000	RWJ $620,000 Other $378,000	RWJ $700,000 Other $325,000	RWJ $690,000 Meadows Fdn $350,000 Public Welfare Fdn $225,000 Other $469,109	Retirement Research Fdn $565,000 Other $422,000	Colorado Trust $734,000 Presbyterian/ St. Luke's $271,000
•Fee for service	$29/day ADC	$35/day ADC $7 transp	$37/day ADC $37/mo case mgmt	community waivers	$37/day ADC nursing, social work, physician services, therapies, home care	$10/half-day ADC	$22/day ADC $6/day transp	$27.50/day ADC
•Other						small respite & elder abuse grants		

TABLE 2: ELEMENTS OF CAPITATION AND PROVIDER ASSUMPTION OF RISK

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Capitated rates/month	$2,405	$1,885	$2,129	$2,880	$4,780-$4,880	$1,970	$2,325	$1,780-$1,887
•Medicaid	$1,465	$1,131	$1,628	$2,033	$3,700-$3,800	$1,350 (1)	$1,197 (2)	$1,114
•Medicare	$940	$754	$501	$747	$1,080	$613	$915	$666-$773 (3)
Availability and type of outlier protection	no	no	no	no, generous rate	no	no	no	no
Extent to which sponsoring organization has experience with pre-paid, capitated care	no	TEFRA HMO	case management project	case management project	LTC demonstration project	no	no	no
Ability to negotiate favorable contracts	yes w/ sponsor	yes w/ sponsor	yes with sponsor	yes	N/A	N/A	N/A	N/A
Importance relative to other projects with sponsoring organization Proportion of sponsors budget it represents at ~ 300 participants	$10M/$16M or 63%	$7M/$126M or 6%	$8M/$225M or 4%	$9M/$11M or 90%	$7M/$50M or 14%	100%	100%	100%
Costs charged against sponsoring organization	administrative cross subsidized	free, shared, or at cost services and consultation	at cost hospital services	cost-share some adm.	medical services & computer services are cost shared	free-standing	free-standing	free-standing
Risk-sharing with providers	no	no	no	Per discharge hospital rate	DRG hospital rate	no	no	no

1 - Medicaid-only waiver during 1st year

2 - Includes average spenddown

3 - Three county catchment area

TABLE 3: OBTAINING CRITICAL SERVICES

Contract services vs. in house

	Capitated				Non-capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Hospital • Rate Arrangements	Contract $800 std $1,800 intensive XIX per diem	Contract w/sponsor $900+/day 'Managed care rate	Contract w/sponsor $800/day 70% charges	Contract $3,280/ discharge	Contract DRG	contract	Contract $650/day	contract
Nursing Home • Rate Arrangements	Ranges $85-122 Average - $100	Contract $54-64/day inter $80-90/day skilled	Contract $100/day XVIII rate	Contract $75 skilled XIX rate	Contract $170/day	contract	Contract $64/day	contract
Home Health - Skilled	contract w/ sponsor	in-house	in-house	contract w/plan to bring in-house	in-house	contract	contract w/ plan to bring in-house	in-house
Homemaker/chore/ personal care	both	in-house	in-house	contract w/plan to bring in-house	contract	in-house	contract w/ sponsor	in-house
Primary Medical	in-house	in-house	in-house	contract w/plan to bring in-house	contract w/plan to bring in-house	in-house	contract w/ plan to bring in-house	contract w/ plan to bring in-house
Rehab-OT, PT	both	in-house	in-house	contract w/plan to bring in-house	in-house	in-house	in-house	in-house
Transportation	contract	in-house	in-house	contract	contract	in-house	in-house	both
Pharmacy	contract	contract w/ sponsor	contract w/ sponsor	contract	contract	contract	contract	contract
Nutrition	contract w/ sponsor	contract w/ sponsor	contract	contract	contract	contract	contract	contract
Laboratory	contract w/ sponsor	contract w/ sponsor	contract	contract	contract	contract	contract	contract

TABLE 4: SERVICE INTEGRATION THROUGH CONSOLIDATION

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Proportion using ADH (1st quarter '91)	100%	100%	100%	100%	50%	100%	93%	100%
•Average visits/month/user (1st quarter '91)	11	12	16	13	3 (1)	13	10	9
Average hrs/month personal care at home/user (1st quarter '91)	19	183 (2)	82	23	180 (3)	58	24	28
Integration of clinic with day care center	well-integrated	well-integrated	well-integrated	well-integrated	moving toward being integrated	part. seen by individual MDs	most clinic appts in separate office	some clinic appts in separate office
Manageability of catchment area Square miles	6 square miles	450 square miles	Richland & Lexington Counties 1400 square mi	Milwaukee County 60 sq miles	Entire Bronx 130 square miles	12-15 sq miles	320 sq mi	Parts of 4 counties 25 sq miles
•Longest distance in miles from home to center	4	15	15	15	15	10	6	15
•Average distance in miles from home to center	N/A	5 to 7	7.5	2	5	5	4	5

1 - per "enrollee" rather than "user" -- not all participants attend ADH
2 - includes care provided in an adult foster home
3 - per "enrollee" rather than "user"

TABLE 5: THE MULTIDISCIPLINARY TERM

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Core staff turnover (start-up to present) (1)	•ADH Center Coordinator •Social Worker	•Site Director •ADH Center Director •Director/Business •Corporate Liaison	•Social Worker x 2 •Staff Physician	•ADH Center Director x 2 •Staff Physician	•Site Director •Medical Director •Staff Physician	•Staff Physician •ADH Ctr Dir x 2 •Nurse x 3 •Social Worker •Site Developer	•ADH Center Director	none
Professional domination	nursing	social work	none	none	nursing	sociology/ gerontology	management	none
Medical School/teaching hospital linkages		Oregon Health Sciences University	University of South Carolina	University of Wisconsin	Einstein/ Montefiore			

1 - Does not include therapists, nursing staff other than RNs (i.e. LPNs, health aides, etc), medical records people.

TABLE 6: FOCUS ON FRAIL ELDERLY -- PARTICIPANT CHARACTERISTICS

(First Quarter 1991)

	Capitated				Non-Capitated				
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**	**On Lok**
% Activity of Daily Living Dependencies (supervision or more)									
Bathing	65	74	94	67	96	83	48	96	84
Dressing	43	51	90	49	94	83	44	88	64
Toileting	17	40	76	38	72	60	44	68	56
Transferring	11	30	64	25	62	56	56	34	65
Walking	12	37	62	25	91	57	48	42	60
Feeding	6	11	3	22	76	34	44	46	22
% Dementia, Alzheimer's type or multi-infarct (from physician evaluation)	15	48	17	30	4	29	53	61	45
% cognitively impaired (4 or less correct)	17	37	57	31	N/A	43	N/A	74	46
Average age (in years)	80	79	77	78	70	79	75	78	81
Average # of medical conditions	6.6	5.9	N/A	5.8	N/A	N/A	N/A	N/A	7.8

TABLE 7: FOCUS ON FRAIL ELDERLY -- ELIGIBILITY

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Medicaid eligibility functional criteria used	Medical or mental impairment and 1 skilled svc needed at least 3x/week and at least 1 ADL deficit	Supervision 4+ ADL or Dependency 1+ ADL	1+ intermediate service (daily monitoring of medical condition or supervision of client w/ psychobehavior deficit) and hands on assistance w/1+ ADL or hands on assistance w/2+ ADLs	Disability in 3 areas (ADL, communication, behavior) and/or lack of informal support such that patient needs 24 hr care or at least 5 days/wk by licensed skilled provider	High level of need in 4 areas (medical events, ADL, behavior; specialized services)	3+ major medical diagnoses and 2+ ADLs	29 out of a possible 100 points in 6 areas (ADL, IADL, continence, routine, & special health needs, supervision) based on both level of impairment and unmet need	20 out of a possible 142 points in 7 areas (ADL, IADL, cognition, communication, medical supervision, continence, skin care)
Standardized instrument and score	LTC assessment form-no scoring, RN review	CAPS SSD 360 Priority C+	HHFSC Form 1718 "Intermediate Level of Care"	Title XIX Patient plan of care evaluation & referral form-no scoring, rated by state employee	180 on DMS-1 or 1.0 on PRI	Form 3652A no scoring, subjective	29 on Determination of Need instrument	20 on ULTC 100
Medicaid financial eligibility criteria used	100% poverty $2,000 assets or medically needy only (any income level must contribute to cost of care the difference between income and 100% poverty)	300% poverty $2,000 assets with contributions to cost of care equal to difference between income and 100% poverty	300% poverty	300% poverty with contributions to cost of care equal to difference between income and 100% poverty	100% poverty $3,350 assets or medically needy only (any income level must contribute to cost of care the difference between income and 100% poverty)	100% poverty	156% poverty $10,000 assets or medically needy only (any income level must contribute to cost of care the difference between income and 100% poverty)	300% poverty with contributions to cost of care equal to difference between income and 100% poverty

TABLE 8: MARKETING ISSUES

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Primary referral sources (from site records, for varying time periods)	34% clinic 15% family/ friends 16% self 9% home care corp.	67% state case managers 18% family/ friends 7% adult foster homes	49% state agencies & case mgrs 18% hospital sowo 11% family/friends	30% community-based org. 25% family & friends 22% outreach 13% hospitals 10% physicians	51% long-term home health agencies 23% hospitals 20% family/self	30% family/ friends 20% hospitals 15% state case mgrs 13% home hlth agencies	36% outreach 21% sponsor 15% state agencies or case mgrs	31% hospitals/ clinics 23% other agencies 14% media 8% case mgrs 8% professionals
Average # referrals/month (from site records, for varying time periods)	42	20	23	24	20	12	16	17
Average # admitted/month (start-up to present)	7	5	6	3	8	3	7	5
Average # disenrollments (other than death)/month (start-up to present)	0.08	0.8	0.38	0.38	3	3.3	0.9	2.5
Average # of death/month (start-up to present)	0.25	0.7	1.38	0.12	3	0.37	0.3	0.18
Perceived barriers to enrollment	Changing hospital Attending ADH	Changing physician	Changing hospital Changing physician Attending ADH	Changing hospital Attending ADH	Attending ADH Changing physician		Changing physician Changing housekeeper Attending ADH	Changing hospital Changing physician Attending ADH
Ethnicity	100% White	89% White 9% Black 1% Hispanic 1% Other	13% White 87% Black	67% White 27% Black 6% Hispanic	48% White 22% Black 28% Hispanic 3% Other	5% White 1% Black 93% Hispanic	0% White 95% Black 3% Hispanic 3% Other	68% White 11% Black 21% Hispanic

TABLE 9: ORGANIZATIONAL ISSUES

	Capitated				Non-Capitated			
	Boston	**Portland**	**Columbia**	**Milwaukee**	**Bronx**	**El Paso**	**Chicago**	**Denver**
Sponsorship	community health center	acute hospital with SNF beds	county hospital & state agency	community organization	SNF	new agency	new agency community organization affiliate	new agency senior clinic in hospital
LTC history of sponsoring organization	geriatric clinic & home care	gerontology program SNF, ADC, TEFRA HMO	state - home care, case mgmt demo hospital - no	case mgmt, elder abuse, & living at home program	comprehensive LTC services, SNF, & housing	N/A	N/A (1)	N/A (2)

1 - Original sponsor continues to operate day care & homemaker/chore programs, site now independent
2 - Original sponsor was hospital with geriatric clinic, site now independent

Figure 1: Stages of Development for PACE Sites

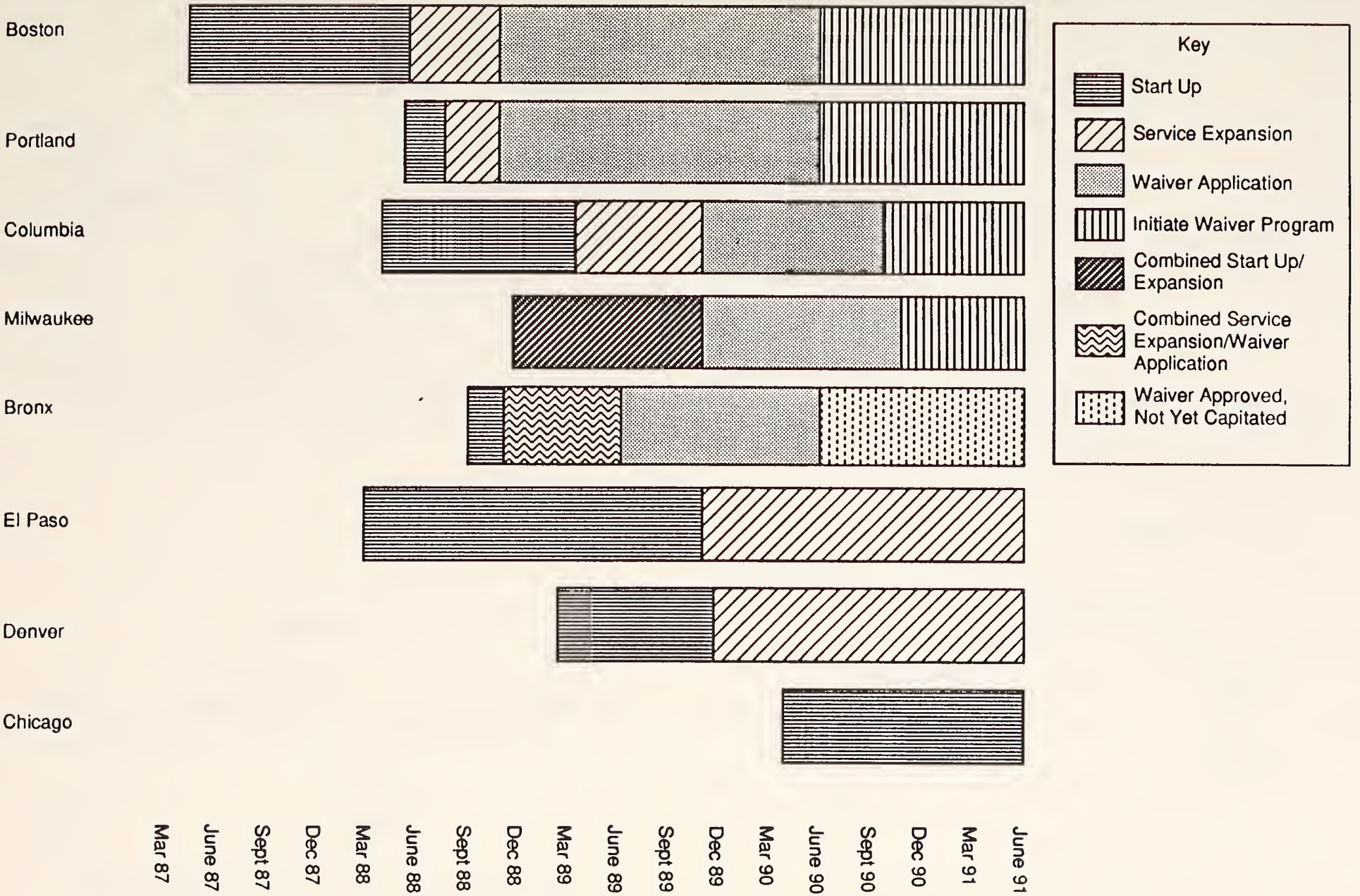
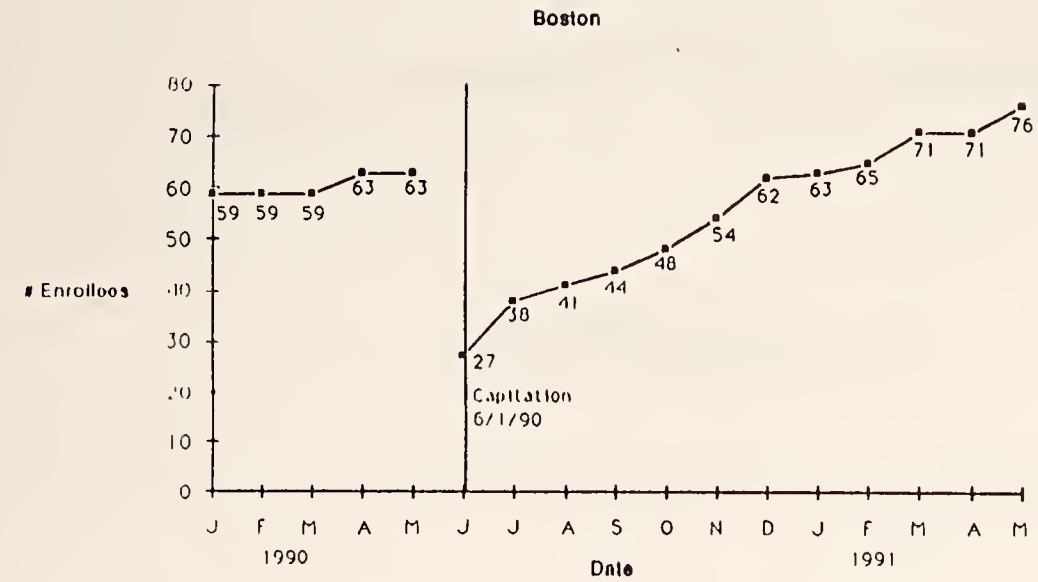
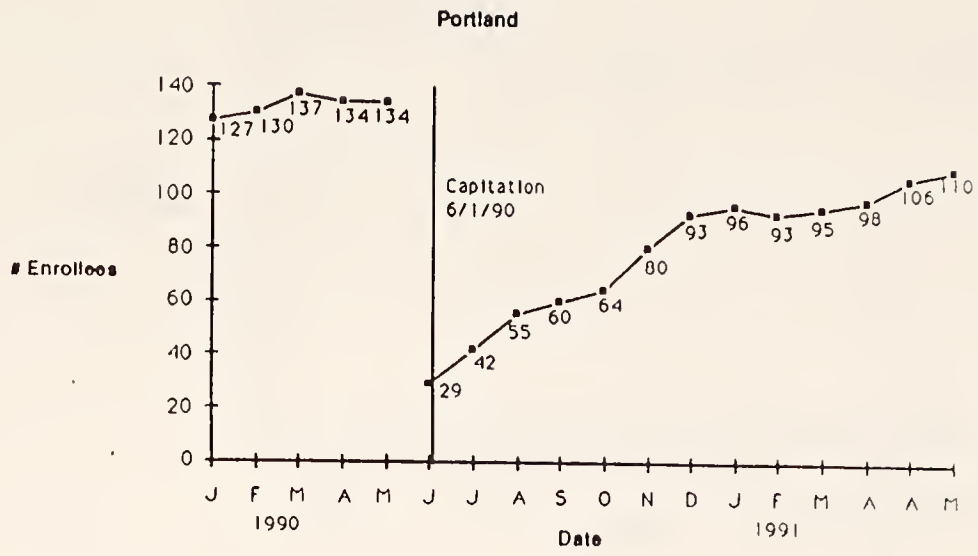
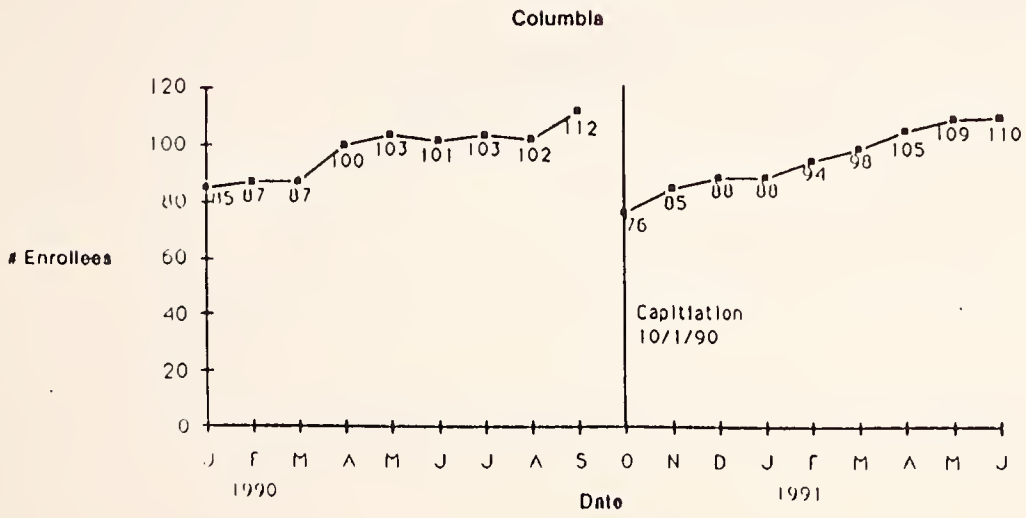


Figure 2: Net Census and Enrollment of Capitated Sites
(Note differences in scale from graph to graph)







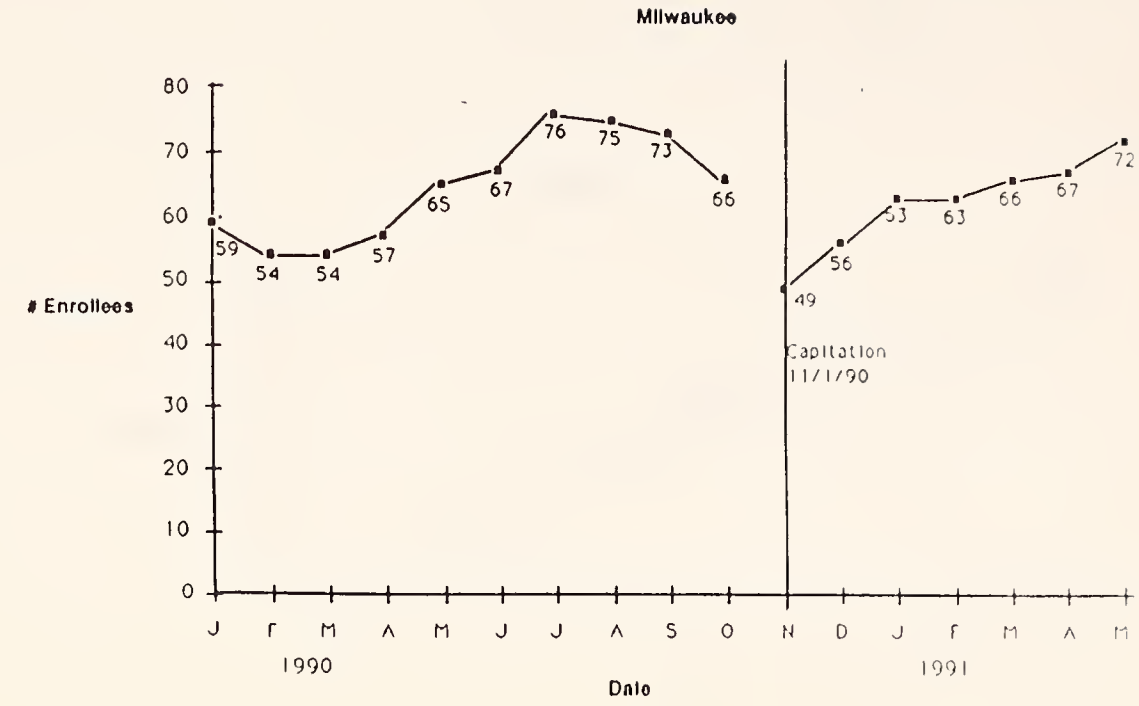
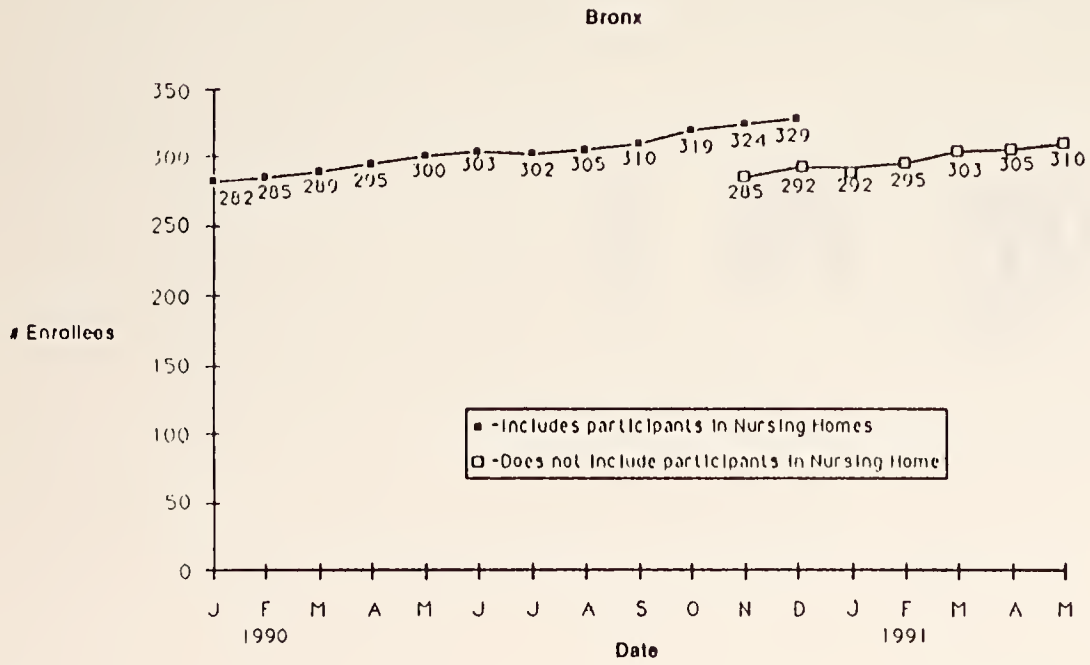
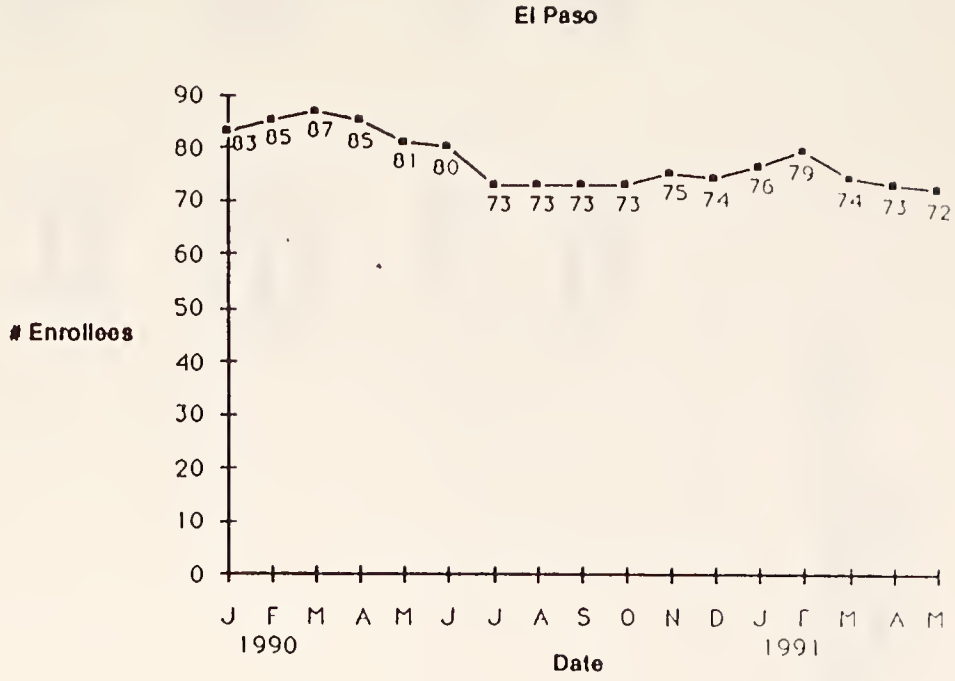
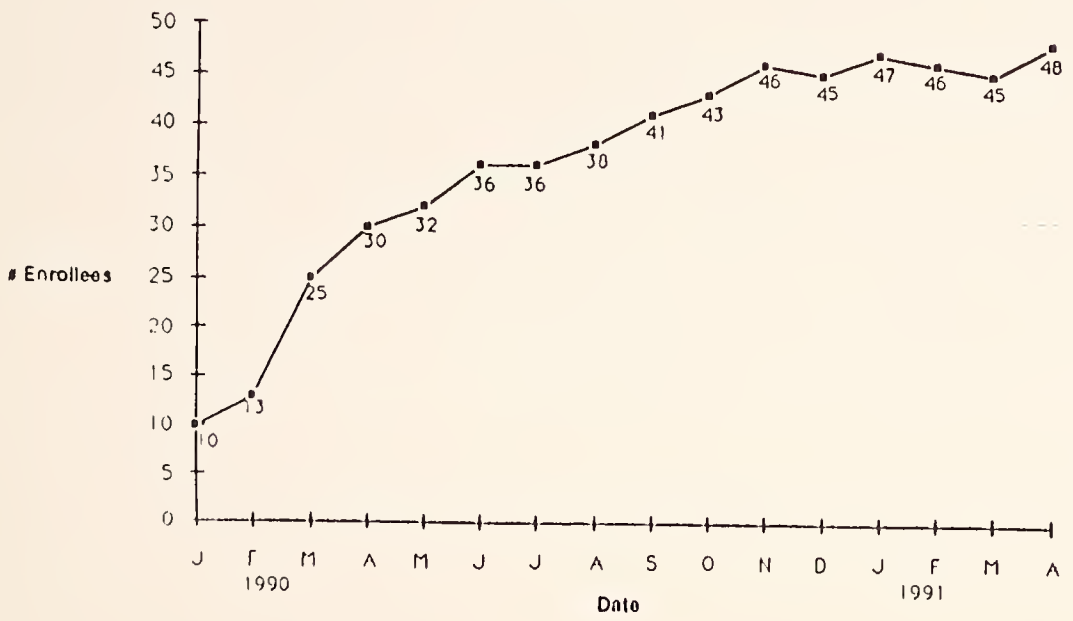


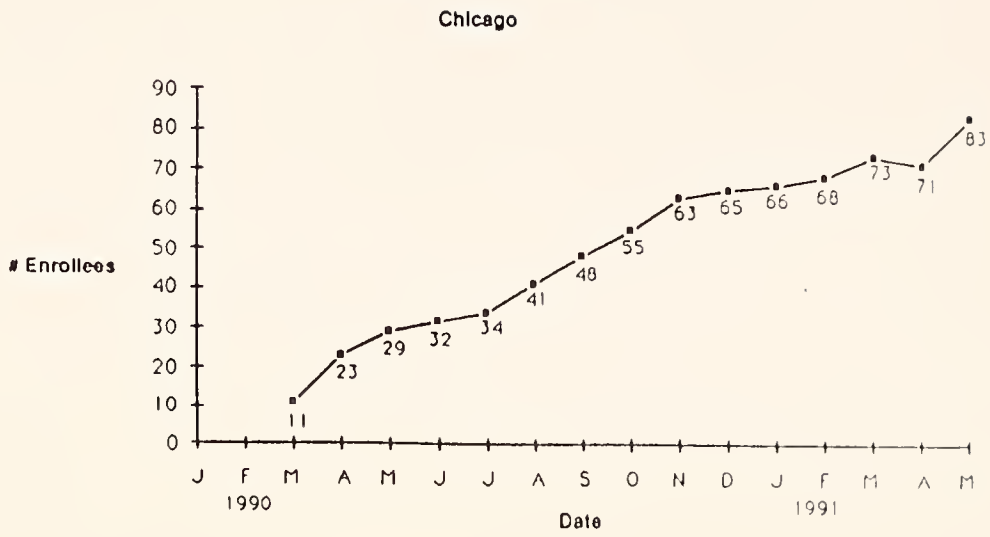
Figure 3: Net Census of Non-Capitated Sites

(Note differences in scale from graph to graph)









APPENDIX A
PACE SITE VISIT SCHEDULE

1990

January		
	8-10	Bronx
	23-24	Milwaukee
February		
	13-14	Boston
March		
	5-6	Portland
	12-13	Columbia
	22-23	El Paso
June		
	13	Chicago
	20-21	Denver

1991

April		
	1	Boston
	3	Portland
	26	Milwaukee
	29	Columbia
May		
	13	Denver
	23	Bronx
	30	El Paso
June		
	10	Chicago

APPENDIX B: OUTLINE OF ISSUES COVERED IN SITE VISITS

CONTROL OF SERVICE DELIVERY BY MULTIDISCIPLINARY TEAM

MULTIDISCIPLINARY TEAM

What is the composition of the multidisciplinary team?

- How much continuity of staff is there (i.e. what is the length of service with project or sponsor)
- Which staff are exclusively dedicated to the project which are shared with Organizational Sponsor
- Which staff are full time? Part time?
- Rate of staff turnover
- Which staff are Salaried? hourly?

New Staff Recruitment

- How do Wages, benefits compare with other local caresettings and positions
- potential for growth
- equity among positions
- any problems in staff recruitment

Selection Criteria

- Important Characteristics e.g. philosophical commitment

New Staff Training/Orientation to model

- How is risk taking incorporated into training

Role Definition

- Sharp definition or considerable overlap

Primary Care Coordinator/Case Manager

- Is this role vested in one or more of the team
- Has the project repudiated this role
- Who has the primary responsibility for client

SPECIAL ROLE OF THE PHYSICIAN

Is there the commitment of a full-time salaried physician to the project

What is the full physician complement

Selection Criteria/Characteristics sought

What problems have been encountered in looking for these characteristics

Physician attitude towards working in a team

- Special efforts to ensure cooperation
- Physician openness to other staff
- Physician teaching of other staff
- Establishment of trust
- Maintaining sense of responsibility
- Willingness to let participant remain in community
- Confidence in oversight capabilities of other staff

Caseload

Coverage management

- Project Physician provide 7-day/week
- Handling of Night calls

Hospital privileges at those preferred by participant and program

- Physician responsiveness to Participant

Extent of use of community hospitals, tertiary centers

Medical care coordination with other project operations

- are physician visits on site

- is there a routine use of appointments
- is there designated support staff for physicians (e.g. nurses and clerical)

What role does the staff Physician play in the standing committees such as Ethics, Medical advisory, and Utilization Review.

CARE CONFERENCE

WHo is the Leader/Facilitator
- Position within project--Independent facilitator or member of caregiving staff
- Special problems with maintaining objectivity

Staff Involvement/Attendance
- By task group (e.g. home care, day health) and discipline (nurse, physician, social worker)
- Who are the dominant people (disciplines) in the care conferences
- Structured mechanism for participation of all disciplines

Time Commitment
- Before and during

Amount of information given per case
Extent of active problem solving e.g. new decisions, changes in approach

OTHER MEETINGS

Other kinds of meetings routinely held
- Daily team meetings
- Department meetings
- Supervisor coordination meetings
- All supervisor meetings
- Family conferences

A typical week's schedule of meetings
Time spent in meetings with other staff
- Daily, Weekly

TREATMENT PLAN

Is there a clear policy about combining assessment and provision of care/Balancing Risks
- How are residents wants balanced with perceived needs
- Matching level of care with care plan
- Willingness of staff to increase/decrease services
- Willingness of staff to manage in outpatient setting

Involvement of clients and families in decisions about care
Encouragement of making choices
Explicitly encouragement of risk-taking
How does staff solicit client preferences
- "Health wishes"

CLIENT/MANAGEMENT INFORMATION SYSTEM CAPABILITIES

Availability of automated information retrieval
Use of PACE Standard reporting system

- intact or modified

Kinds of information available

- Client assessment, reassessments
- Changes in levels of care
- Utilization profiles
    - in-house
    - contracted
    - hospital and NH use at any one time
- Demographics of enrollees

Timeliness of information

Deliberate structuring of information for staff

QUALITY ASSURANCE

Internal

- What grievance procedures are available
- Oversight Committees: Medical advisory, utilization Review, ethics
- Have standards of care been developed

External

- Meeting Licensing standards
    - problems, barriers

Are there special issues for projects with primary care setting other than day health center

CONTINUUM OF SERVICES

DESCRIPTION OF LTC SERVICES AVAILABLE

Which services are provided? Which are contracted?
Have there been any problems recruiting staff for any of the services?

DAY HEALTH

Is DHC used as Primary Delivery Setting
What is the Core team composition
Are DHC Staff separate from Medical Services staff
Fostering and monitoring of Communication among team
How are shared goals establishment
How is service use controlled
What efforts are made for team building
What kind of turnover is there in DHC
Special issues for programs with more than one day health center

IN-HOME SERVICES

Flexibility of workers' hours
- Typical working hours
  - Is travel time included
- Block times per client

Characteristics of home care staff
- Selection criteria e.g. Backgrounds
- Staff salaries
- Benefits
- How many staff are full time? part time?
- How much turnover

How is care supervised
Is the DHC used or monitoring of care/verification
Determination of the amount of care needed

MEDICAL SERVICES

How is primary care organized
- Who provides primary care
  - MD
  - Social workers
  - RNs
  - ADH health workers
  - home care staff

How important is it that the same staff associate with clients (i.e. continuity of care)
What arrangements have been made for medical specialists
What arrangements have been made for ancillary services

INPATIENT SERVICES

Goal of Minimizing Hospital Use
- Incentives and Reinforcements

Services brought into hospital and NH
Provisions for short-term nursing home stays

TRANSITIONAL HOUSING

Role played in continuum of care
Primary Use
What are the limits to use of transitional housing
Are there barriers as well as self-imposed limitations

TARGETING FRAIL ELDERLY

TARGET POPULATION

Planned target population vs. current population
How was planned population defined?
What are the characteristics of the current population
- Age
- Medical diagnosis
- functional impairment
- cognitive impairment

Screening instrument

ENROLLMENT/OUTREACH ACTIVITIES

Enrollment
- goals
- basis for goals
- expected vs. actual proportion from organizational sponsor
- expected vs. actual proportion from other care settings

Catchment/service area
- logistical limits

Barriers
Competition
- TEFRA HMOs

MARKETING

How have you targeting the decision-makers
Program presentation
- Before and after waiver (i.e. before capitation after capitation)

Espoused benefits in lieu of organization sponsor
Physician and participant resistance to giving up primary care provider
Freedom of choice issues re: physician, pharmacy
- How big a problem has this presented

Methods of information dissemination
Targets of information e.g. welfare workers, families, neighbors, clients, hospital discharge
Organizational history in marketing

COMMUNITY RESIDENCE/SUPPORT

HOUSING RESOURCES

Availability of adequate housing for very frail in surrounding community

Arrangements for supportive housing

- contract with housing sites
- joint projects with HUD

EFFORTS TO BRING ON LOK INTO THE COMMUNITY AND VICE VERSA

Volunteer programs

Joint programs with other community organizations

LINKS TO COMMUNITY AGENCIES

What links exist?

Are services exchanged

INTEGRATED FUNDING

MEDICARE/MEDICAID

- Developing waiver rates
  - Medicaid: problems finding comparable populations
- How are Medicaid and Medicare dollars tracked?

PRIVATE PAY/PRIVATELY INSURED

- Policies for the private pay
  - Are there provisions for families buying services above those authorized?
  - Potential conflicts

COSTING MECHANISMS

- How is costing done
  - How much is charged to fixed costs (overhead)
  - How much is variable
  - How is the tracking of these done
- Start up vs. operational costs
- Hidden costs
- Is client specific accountability available
- Overhead

ASSUMPTION OF RISK

FISCAL/MANAGEMENT INFORMATION SYSTEM CAPABILITIES

Financial: projectioned budget vs actual
- Revenue (XIX, XVIII, private)
- Costs (fixed, variable)

Regular cost report generation
- High cost, low cost

Individual Cost Centers
- Institutional rate

Integration with Client Information
Monitoring capabilities for contract services
Availability of cost information to staff
Problems with estimates and projects

RISK SHARING OUTSIDE PROJECT

Is there any risk sharing with contracted services
- How are contracted services managed?
- What tradeoffs exist between contracting and in house
- Specific problems with each

Provisions for risk sharing with Medicaid and Medicare before full risk is assumed

RISK RESERVE FUND

What provisions have been made?
What portion of monthly income goes to this?
Is secondary insurance used?

OTHER

ENVIRONMENT

Supply of services in area
- Physicians
- Hospital beds
- Nursing home beds
- Moratoriums
- Evidence of over- under-utilization

Climate for community-based care in state
- promotes or inhibits use/expansion
- cooperation of state legislature and agencies

Community climate
- Physician acceptance

Waiver authority for reimbursement of Community-Based Care under XIX

Regulatory climate

Competition/alternatives
- TEFRA HMOs

Other demonstrations in state, region

ORGANIZATION

Prior History
- innovations

Decision surrounding PACE involvement
- market niche
- reliable source of income while expanding

Mission/Philosophy
- explicit - mission statement
- implicit
- organization vs. project
- potential conflicts

Organizational Chart
- project's position within
- linkages (e.g. board membership, staff roles)

Management/service provider interaction

GENERAL

Site's view of essence of concept

Most (least) difficult elements to replicate